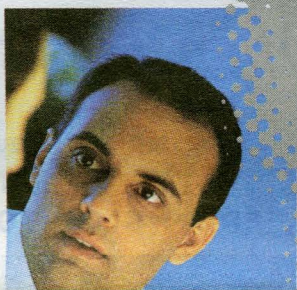


2005  
Summer

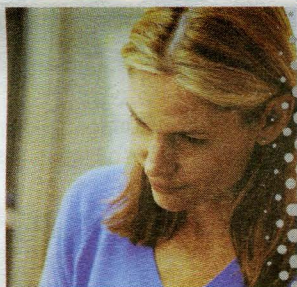
It's all about *your*

**FUTURE**



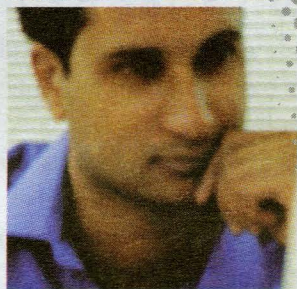
#### EXPANDED OPTIONS

- On-campus & Online
- Onsite Corporate



#### NEW ACCELERATED SESSIONS

- 6, 8, & 10 weeks



#### NEW HIGH DEMAND PROGRAMS

- Criminal Justice
- Education



#### CLASSES BEGIN MAY 23, 2005 UNDERGRADUATE & GRADUATE COURSES

- 3 Certificate Programs
- 5 Degree Programs
- 6 Corporate Education
- 7 Online Degrees & Certificates
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- 16 Graduate Courses & Programs
- 17 General & Academic Registration Information
- 20 Registration Form



**SEE OUR ACCELERATED SUMMER SCHEDULE INSIDE.**

**Summer Session I: May 23 – June 30**

**Summer Session II: July 11 – August 19**

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University of Massachusetts Lowell  
Continuing Studies and Corporate Education  
One University Avenue  
Lowell, MA 01854-2881  
(978) 934-2480

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# The decisions you make this Summer can impact your **CAREER & FUTURE**

This Summer we've made it easier for you to fulfill your dream of pursuing a degree or certificate program. Consider these options:



#### EXPANDED DELIVERY OPTIONS.

Take courses on-campus, online, or onsite at your company.



#### NEW ACCELERATED 6, 8, AND 10 WEEK SESSIONS.



#### NEW HIGH DEMAND PROGRAMS:

2nd Bachelor's Degree in Information Technology (see page 5)

New concentrations available for the Bachelor's in Liberal Arts (see page 5)



#### ACCELERATED 10 WEEK SESSIONS IN CRIMINAL JUSTICE AND EDUCATION PROGRAMS.



#### LARGER SELECTION OF GENERAL EDUCATION COURSES (SEE PAGE 20).



#### OPPORTUNITIES TO APPLY TRANSFER CREDITS AND CREDITS EARNED THROUGH DEPARTMENTAL EXAMS TOWARDS YOUR DEGREE.



#### NEW LOCATIONS:

Health programs offered at Mass Eye and Ear (see page 6).

TO FIND OUT JUST HOW EASY IT IS TO COMPLETE YOUR DEGREE OR CERTIFICATE, CALL OUR FACULTY AND STUDENT SUPPORT CENTER AT 978-934-2474 OR JOIN US AT OUR OPEN HOUSE ON MAY 12TH.

## Continuing Education Open House

Please join us for the Continuing Studies and Corporate Education Summer Semester Open House and General Registration

ON THURSDAY, MAY 12, 2005, FROM 5:00 TO 7:30 P.M. AT UML SOUTH.

### FIND OUT ABOUT

- Certificate Programs & Degrees
- Online Courses

Academic Advisors will be available. Please note: Transfer credits will not be evaluated during the Open House. Students should plan on making individual appointments with an Academic Advisor prior to the Open House. For further information, call (978) 934-2480.



### EARLY BIRD ADVISING

Call the Advising Center at (978) 934-2474 to set up an appointment with a General Counselor to review your program worksheets and plan for the upcoming semester. **SUMMER TERM BEGINS MAY 23, 2005.** For a complete list of courses, visit <http://continuinged.uml.edu> or contact us at (978) 934-2474 for more information.

### EARLY BIRD INFORMATION SESSIONS

Continuing Studies Counselors will hold Early Bird Information Sessions for those who would like to learn more about our programs and financial aid. All current students and prospective students are invited to participate. These presentations will be followed by an informal question and answer period.

- Monday, May 2, 2005 at 1:00 pm

Call Continuing Studies today at (978) 934-2474 to reserve your space.

### New Student Orientation

Thursday, May 12 • 6:00-6:30 p.m.

Are you a new student to Continuing Studies and Corporate Education? Do you have questions about registration, tuition, financial aid, applying to a degree or certificate program, etc.? Find out how easy it is to get answers to questions such as:

- How do I select a course and check for prerequisites?
- How do I register?
- Am I able to enroll in a degree or certificate program?
- When do I pay for my courses?
- Where is my classroom located?
- How do I take a course online?
- How do I use the electronic library?

Call the Advising Center today at (978) 934-2474 to reserve your seat!

### • Online Orientation Session

Thursday, May 12

5:30-6:15 pm

Come see how **easy** it is to take a course **online!** Want to learn more about taking a course over the Internet? Are you planning on registering for an online course this semester? This orientation will introduce you to the features of your online course and answer any questions you may have.

Call (978) 934-2474 to reserve your seat in one of these sessions!

### • Project Management Information Session

Thursday, May 12

6:00-7:30 pm

Come and find out about UMass Lowell's new Project Management Training Program. Don't miss this opportunity to learn more about the latest tools and business trends that many successful companies are implementing today.

Space is limited so sign up today at <http://continuinged.uml.edu/projmgmt>. Call (978) 934-2261 for more details.



# Certificate Programs

 **Six to Ten Courses for a New Career**


 **Count Your Certificate Courses Towards a Degree!**

## Free software.

**GET FREE MICROSOFT® DEVELOPER SOFTWARE WHEN YOU REGISTER FOR CERTAIN UMASS LOWELL COURSES!**

UMass Lowell has recently joined the Microsoft Developers Network Academic Alliance (MSDNAA). The MSDNAA provides a complete, inexpensive solution to keep UMass Lowell's academic labs, faculty and students on the leading edge of technology.

This program allows UMass Lowell to provide the software to students taking certain credit courses so they can load the software on their personal computers for use in coursework and personal projects. The software includes the latest set of Microsoft platforms, servers, and developer tools currently available including Visual Studio .NET 2003 Professional and Windows XP Professional.

Refer to the courses with the  icon designating all applicable courses.

FOR A COMPLETE LIST OF ALL APPLICABLE COURSES AND OTHER INFORMATION, PLEASE VISIT HYPERLINK <http://continuinged.uml.edu/msdnaa.htm>



## Database Management Technologies (formerly Client/Server Database Design and Administration)

**Use Towards a Degree in Information Technology!\***

The Database Management Technologies Certificate program, as part of Oracle Corporation's Academic Initiative (OAI), prepares students for the requirements and rigors of becoming an in-demand Database Administrator or Developer. Centered on the industry-leading Oracle 10g/11i™ product suite, students engage in a progressive learning experience. Hands-on skill building throughout the program will prepare students for challenging and highly rewarding positions in today's data-driven industry. In addition to preparing for Oracle Professional Certification, students may apply all courses towards a degree in Information Technology. Whether pursuing an academic degree, certification or both, our Oracle-certified faculty will help students gain valuable technical skills as a marketable enhancement to their overall academic program of study.

### Required Courses:\*\*

\*Note: Students with experience equivalent to any of the required courses may substitute up to two electives for the required courses, with prior approval of the program coordinator.

90.450	Database Administration I: Introduction to Oracle 10g
90.453	Database Administration II: Advanced Oracle 10g
90.454	Oracle 10g SQL Development
90.459	PL/SQL I: Introduction to Oracle 10g PL/SQL

### Electives: Developer Track (Choose 3):

90.448	Oracle 10g Portal Development
90.449	Oracle 10g Forms and Reports
90.467	PL/SQL II: Advanced Oracle 10g PL/SQL
90.474	Relational Database Concepts

### Electives: Administrator Track (Choose 3):

90.443	Introduction to Client/Server Computing
90.445	SQL Database Servers
90.455	Database Administration III: Oracle 10g Projects
90.466	Oracle 10g Data Warehousing
90.479	Oracle 11i Applications DBA

See page 10 for our NEW Oracle 10g courses.

See page 10 for our NEW Oracle 10g courses.



## UNIX®

**Use Towards a Degree in Information Technology!\***

The Certificate in UNIX is designed for those currently in the computer industry who want to upgrade their skills, and for those with basic computer literacy who want to enter this fast-growing field. Students learn skills that are immediately applicable in the workplace as well as C Programming, the language in which most networking software is written. Many of the courses in the UNIX certificate program may be used to satisfy requirements in the Fundamentals of Information Technology and Data/Telecommunications Certificate Programs, as well as the A.S. or B.S. degrees in Information Systems. You can now earn the Certificate in UNIX online! See the Continuing Education website at <http://continuinged.uml.edu/online> for more information.

### Required Courses:

90.267	C Programming
90.311	Introduction to the UNIX Operating System
90.312	UNIX Shell Programming
90.360	Introduction to Data Structures

### Electives (Choose 2):

90.268	C++ Programming
90.269	Advanced C++
90.313	UNIX Internals Overview
90.316	UNIX System Administration
90.318	Advanced UNIX Internals/Tuning
90.319	Introduction to Linux
90.321	Linux System Administration



## Data/Telecommunications

**Use Towards a Degree in Information Technology!\***

The Certificate Program in Data/Telecommunications trains participants for positions as entry-level network administrators, LAN technicians, and system analysts responsible for networking functions in large or small companies. Many of the courses in this certificate program can be applied towards the A.S. or B.S. degree in Information Systems.

### Required Courses:

90.267	C Programming
90.311	Introduction to the UNIX Operating System
90.461	LAN/WAN Technologies
90.462	TCP/IP and Network Architecture
90.463	Advanced Networking Technologies

**"Massachusetts High Technology Council predicts improved job market for technology workers."**

Source: Boston Globe, Sunday, March 13, 2005

### Electives (Choose 1):

90.464	Network Management
90.483	Wireless Communications
90.484	Optical Networking – Sonet/SDH



## Intranet Development

**Use Towards a Degree in Information Technology!\***

The Certificate Program in Intranet Development provides students with an understanding of the range of skills required to develop a successful intranet. Students are required to complete an intranet survey course, a database design course, and an interface design course, as well as core programming courses. In addition, students will select two electives which support an area of focus in intranet development. Students completing the Certificate Program in Intranet Development can qualify for positions as intranet developers, database integration specialists, systems operators, systems administrators, or corporate Webmasters. Earn the Certificate in Intranet Development online! See the Continuing Education website at <http://continuinged.uml.edu/online> for more information.

### Required Courses:

90.340	Intro. to the Application and Development of Intranets
90.341	Intranet Applications for the Organization
90.461	LAN/WAN Technologies
90.474	Relational Database Concepts

### Electives (Choose 2):

90.267	C Programming
90.268	C++ Programming
90.301	JAVA Programming
90.305	Introduction to Perl
90.342	Web-Enabled Database Development
90.462	TCP/IP and Network Architecture
90.490	Intranet Practicum/Internship



## Contemporary Communications

**Use Towards a Degree in Information Technology or Liberal Arts!\***

The Contemporary Communications Certificate is intended as an introductory certificate to prepare students for work in a rapidly changing, information-driven workplace. Students will develop skills in research, analysis, writing, graphic presentation of material, and the use of technology as a tool for communication. This certificate program is interdisciplinary and draws upon the expertise and knowledge of several departments within the University. Many of the courses in this certificate can also be applied towards several other certificates and degrees offered by UMass Lowell.

### Required Courses:

#### Written Communication (Choose 1):

42.221	Writing for Interactive Media
42.224	Business Writing
42.226	Technical and Scientific Communication

#### Computer-Based Communications (Choose 1):

90.202	Intro to PCs and MS Office
91.113	Exploring the Internet

#### Strategic Thinking & Effective Communication (Choose 1):

45.205	Argumentation and Rhetoric
45.207	Corporate Communications
62.201	Marketing Principles

#### Multimedia/Graphic Design and Development (Choose 1):

70.291	Introduction to Graphic Design
90.230	Introduction to Multimedia

### Electives (Choose 2):

42.221	Writing for Interactive Media
42.224	Business Writing
42.226	Technical and Scientific Communication
42.300	Journalism
45.205	Argumentation and Rhetoric
45.207	Corporate Communications
45.356	The History, Theory, and Practice of Rhetoric
62.201	Marketing Principles
70.291	Introduction to Graphic Design
90.202	Intro to PCs and MS Office
90.230	Introduction to Multimedia
90.291	Intro to DHTML
91.113	Exploring the Internet

\*Many of the courses in these certificates can be applied towards a part-time degree. See page 5 or visit our website for more information on degrees. For information on how to apply these courses into your degree, call our friendly advisors at (978) 934-2474.

For more information on any of these certificate programs visit our Website at <http://continuinged.uml.edu> or call (978) 934-2474.





## Technical Writing

Use Towards a Degree in Information Technology!\*

Those with strong writing skills and an aptitude for computers are encouraged to enter this program. Taught by practicing professionals from the high tech industry, students learn to use the most current technologies and processes. Students enrolled in the certificate program are eligible for special internship opportunities and can apply for scholarships sponsored by the Society for Technical Communication.

### Required Courses:

- 42.401 Principles of Technical Writing
- 42.402 Software Writing
- 42.403 Advanced Software Writing
- 90.202 Introduction to Personal Computers and Microsoft Office\*

### Electives (Choose 2):\*\*

- 42.221 Writing for Interactive Media
- 90.227 Developing Interactive Help Systems: Robo Help
- 90.228 Introduction to Adobe FrameMaker
- 90.291 Intro to DHTML

\*Note: Students who have previous computer experience may substitute a more advanced computer course for this computer course.

\*\* This is a partial list of elective courses. For a complete list of courses that may be applied as electives to this program, see the Continuing Studies Undergraduate Course Catalog or check our online course listings for computer courses with a 90. OR 92. prefix. For assistance with your course selection, please contact the Advising Center at (978) 934-2474

## Creative Arts/Media APPLICATIONS



## Website Design & Development

Use Towards a Degree in Information Technology!\*

In our rapidly-evolving, knowledge-based economy, workers are struggling to keep up with the latest technologies and skills. Specifically, in the area of internet technology, local companies are actively pursuing employees with knowledge and skills in website design and development. Note: Students participating in this program should have basic Mac OS and/or Windows familiarity.

### Required Courses:

- 90.291 Introduction to DHTML
- 90.231 Graphics for Multimedia and the World Wide Web
- 90.238 Website Development: FrontPage®
- 70.379 Website Design
- 70.384 Advanced Website Design and Development

### Electives (Choose 2):

- 70.262 Digital Imaging and Photography: Photoshop®
- 70.385 Streaming Media for the Web
- 78.201 Introduction to Audio for Multimedia and the World Wide Web
- 90.227 Developing Interactive Help Systems: Robo Help
- 90.230 Introduction to Multimedia
- 90.236 Instructional Design for Interactive Media
- 90.245 Website Server Administration
- 90.246 Active Server Pages
- 90.247 Web Authoring: Flash™ MX
- 90.248 Website Database Implementation
- 90.249 Developing IT Training for the Web
- 90.250 E-Commerce on the Web
- 90.292 Advanced DHTML
- 90.301 Java Programming
- 90.302 JavaScript
- 90.305 Introduction to Perl
- 90.306 Introduction to XML
- 90.347 Rich Web Development with Flash™ MX (Advanced)
- 90.348 Developing Dynamic Websites with ColdFusion® MX

## Additional Certificate Programs

UMass Lowell also offers certificate programs in:

Environmental Technology	Manufacturing Technology	Plastics Engineering Technology
Hazardous Waste Management	Nutrition Paralegal Studies	Wastewater Treatment
Land Surveying	Spanish	Water Treatment

For a free brochure on our part-time engineering technology programs, call (978) 934-2474.



## Multimedia Applications

Use Towards a Degree in Information Technology!\*

The Multimedia Certificate Program at UMass Lowell is one of the largest, most comprehensive programs of study in multimedia available in New England. It draws upon the expertise of several departments, colleges, and centers within the University, as well as outside expertise from industry professionals. You can now earn the Certificate in Multimedia Applications online! See the Continuing Education website at <http://continuinged.uml.edu/online> for more information.

### Required Courses:

- 90.230 Introduction to Multimedia
- 90.231 Graphics for Multimedia and the World Wide Web
- 90.232 Desktop Video Production
- 90.233 Multimedia Authoring Software: Macromedia Director® MX

### Electives (Choose 3):

- 42.221 Writing for Interactive Media
- 70.262 Digital Imaging and Photography: Photoshop®
- 70.264 Computer Graphics and Illustration
- 70.291 Introduction to Graphic Design
- 70.376 3D Computer Animation
- 70.377 Advanced Animation: After Effects®
- 70.379 Website Design
- 70.384 Advanced Website Design and Development
- 70.385 Streaming Media for the Web
- 78.201 Introduction to Audio for Multimedia and the World Wide Web
- 90.234 Designing and Developing Interactive Media
- 90.236 Instructional Design for Interactive Media
- 90.238 Website Development: FrontPage®
- 90.239 Multimedia Scripting Using Macromedia Director's Lingo™
- 90.247 Web Authoring: Flash™ MX
- 90.249 Developing IT Training for the Web
- 90.250 E-Commerce on the Web
- 90.291 Introduction to DHTML
- 90.306 Introduction to XML
- 90.347 Rich Web Development with Flash™ MX (Advanced)
- 90.348 Developing Dynamic Websites with ColdFusion® MX



## Graphic Design & Digital Imaging

Use Towards a Degree in Information Technology or Liberal Arts!\*

This certificate program offers students interested in breaking into graphic design and electronic publishing an innovative mix of traditional design courses along with several courses in the latest publishing technologies. From traditional graphic design to designing for multimedia and the World Wide Web, students in the program complete numerous portfolio pieces geared towards the professional market.

### Required Courses:

- 70.291 Introduction to Graphic Design
- 70.240 Fundamentals of Typography
- 70.245 Desktop Publishing: Layout and Production
- 70.262 Digital Imaging and Photography: Photoshop®
- 70.391 Advanced Graphic Design
- 70.400 Portfolio Production Seminar

### Electives (Choose 3):

- 70.264 Computer Graphics & Illustration
- 70.362 Advanced Digital Imaging
- 70.376 3D Computer Animation
- 70.377 Advanced Animation: After Effects®
- 70.379 Website Design
- 70.384 Advanced Website Design & Development
- 70.392 Design for Advertising
- 90.230 Introduction to Multimedia
- 90.231 Graphics for Multimedia and the World Wide Web
- 90.233 Multimedia Authoring Software: Macromedia Director® MX
- 90.238 Website Development: FrontPage®
- 90.247 Web Authoring: Flash™ MX

**ATTENTION GRAPHIC DESIGN STUDENTS  
NEW THIS SUMMER!**  
Check out our Macintosh® G5 Lab



## Computer Engineering Technology

Use Towards a Degree in Engineering Technology!\*

The Certificate Program in Computer Engineering Technology is designed to provide students with a broad-based knowledge of digital electronics, microprocessors and advanced digital technologies. Students enrolled in the program must complete the seven courses listed below. The curriculum includes engineering science and design courses that provide a balanced view of hardware, software, application trade-offs and the basic modeling techniques used in computer engineering. All the courses in this certificate program can be applied towards the B.S. degree in Electronic Engineering Technology.

### Required Courses:

- 17.341 Logic Design I & Laboratory
- 17.342 Logic Design II & Laboratory
- 17.353 Digital Electronics
- 17.383 Microprocessors A
- 17.384 Microprocessors B
- 90.267 C Programming
- 90.268 C++ Programming

## Engineering TECHNOLOGY



## Electronics Technology

Use Towards a Degree in Engineering Technology!\*

The Certificate Program in Electronics Technology is designed to provide students with a broad-based knowledge of circuit theory and electronics, with laboratory work included to ensure that good hands-on experience is acquired along with the deep understanding of fundamental and changing technologies. All the computer courses in this certificate program can be applied towards the A.S. or B.S. degree in Electronic Engineering Technology.

### Required Courses:

- 17.213 Circuits I
- 17.214 Circuits II and Laboratory
- 17.215 Circuits III and Laboratory
- 17.216 Circuits IV
- 17.341 Logic Design I and Laboratory
- 17.355 Electronics I & Laboratory
- 17.356 Electronics II & Laboratory
- 17.357 Electronics III & Laboratory
- 17.358 Electronics IV & Laboratory



## Computer-Assisted Manufacturing

Use Towards a Degree in Engineering Technology!\*

As the United States focuses on the challenges of global economic competition, one of the key tools for sharpening our competitive edge is the use of the computer as an aid to engineering and manufacturing. The Certificate Program in Computer Assisted Manufacturing is designed to provide engineers, technicians, managers and those working in a manufacturing environment with an introduction to the computer as used to enhance industrial competitiveness. Students will apply various popular software packages and work with personal computers.

### Required Courses:

- 23.200 Computer Aided Drafting (CADrf)
- 23.419 Computer Aided Manufacturing
- 23.480 Computer Aided Design (CADes)
- 23.484 Intro Pro-E OR
- 23.485 Intro to SolidWorks

### Electives (Choose 2):

- 23.101 Engineering Graphics
- 23.102 Engineering Design and Graphics
- 23.301 Manufacturing Technology Laboratory
- 23.305 Manufacturing Processes

## Criminal JUSTICE



## Security Management and Homeland Security

Use Towards a Degree in Criminal Justice!\*

Since September 11th, the U.S. Department of Labor has been predicting that the employment of security management personnel will grow faster than all other occupations due to the threat of terrorism. This part-time certificate program is designed for personnel working in the areas of public safety, security management, and law enforcement; executives in corporations responsible for overseeing in-house security programs; and information technology professionals. Criminal justice students interested in enhancing their future career prospects may also benefit from this program by broadening their studies to encompass security within private industry. All courses can be applied toward UMass Lowell's part-time Bachelor's Degree in Criminal Justice.

### Required Courses:

- 44.115 Introduction to Homeland Security
- 44.241 Physical Security
- 44.312 Security Management
- 90.385 Introduction to Information Security (Cyber Security)

### Electives (Choose 2):

- 44.234 Criminal Law
- 44.248 Terrorism
- 44.326 Domestic Terrorism and Hate Crimes
- 44.342 Criminal Profiling
- 44.343 Forensic Psychology
- 44.380 Special Topics: Weapons of Mass Destruction

**According to the Department of Labor,  
employment in criminal justice is expected  
to grow faster than the average for all  
occupations through 2012.**

source: <http://bls.gov/oco/ocos160.htm#outlook>





# FINISH YOUR DEGREE ON CAMPUS, ONLINE, OR BOTH!



## EARN A BACHELOR'S DEGREE IN

### Liberal Arts

Students whose education plans were interrupted are perfect candidates for UMass Lowell's part-time Liberal Arts Degree. The Bachelor of Liberal Arts (BLA) degree is designed to provide students with a balanced liberal arts curriculum, while also exposing them to an in-depth study in areas of concentration such as psychology, history, art history, women's studies, english, and legal studies.

1. [Psychology Concentration](#)
2. [Art History Concentration](#)
3. [Women's Studies Concentration](#)

#### ASK ABOUT OUR NEW

#### 4. [Legal Studies Concentration](#) for the BACHELOR OF LIBERAL ARTS DEGREE!

##### Courses include:

- 41.262 Introduction to Business Law (GenEd Course/Required Introductory Course)
- 41.360 Legal Issues in Racism
- 41.363 Corporate and Property Law
- 41.367 Environmental Law
- 41.370 Real Estate Law
- 41.376 Family Law
- 41.381 Women and the Law
- 41.387 Legal Research Methods
- 41.490 Legal Aspects of Cyberspace

#### ANNOUNCING A NEW

#### 5. [History Concentration](#) for the BACHELOR OF LIBERAL ARTS DEGREE!

##### Courses include:

- 43.107-031 World History I
- 43.108-031 World History II
- 43.112-031 U.S. History Since 1877
- 43.242-031 The Second World War
- 43.270-031 Women in American History
- 43.274-031 Native American History
- 43.308-031 History of Crime & Social Control
- 43.336-031 Problems of Modern Ireland
- 43.370-031 Medieval Institutions
- 43.393-031 History of the Middle East
- Electives (Choose 2)
- 58.300-031 Art History, Music and Culture
- 58.321-031 Italian Renaissance Art
- 58.330-031 Italian Mannerist Art
- 58.340-031 Women and Art
- 58.345-031 Pre-Raphaelite Art

To find out more about the part-time Liberal Arts Degree, stop by the Continuing Studies Open House on May 12th, email Susan\_Wartman@uml.edu or call (978) 934-2474.

#### COMING THIS SUMMER...

#### 6. [English Concentration](#) for the BACHELOR OF LIBERAL ARTS DEGREE!

## EARN A 2ND BACHELOR'S DEGREE IN

### Information Technology!

Interested in changing careers? If you already have a Bachelor's Degree in another discipline and would like to pursue a second degree in Information Technology, UMass Lowell has a special program for you. Students can pursue a Second Bachelor's in IT by taking 10 additional IT courses in designated areas. See our website at <http://continuinged.uml.edu/degrees/2ndBSIT.htm> for more information.

## EARN A BACHELOR'S DEGREE IN

### Information Technology



*"I knew I had to get a high-demand credential and that I had to do it quickly. By taking a mix of online and on-campus courses, I was able to accelerate my progress towards earning a degree in Information Technology."*

— Valerie Cox, Recent Graduate

Students who graduate with a degree in Information Technology are able to manage networks, write software, build web pages and multimedia presentations, or create and manage databases, depending on the areas they choose to study. The curriculum strikes a balance between theoretical and applied uses of information technology and is taught by faculty who are cutting edge practitioners as well as educators. This degree provides students with the flexibility to integrate previous college and work experience with a program tailored to the student's preferred area of specialization. Concentrations are formulated around areas such as programming, networking, database design and management, graphic design, or multimedia, and combined with general education courses to enable students to complete their degree as quickly as possible with the knowledge they need for their careers.

For more information on our B.S. in Information Technology, please visit our website or call the Advising Center at 978-934-2474.

## EARN A BACHELOR'S DEGREE IN

### Engineering Technology

#### Civil Engineering Technology • Electronic Engineering Technology Mechanical Engineering Technology

*"The professors and educational staff at UMass Lowell are extremely passionate about what they do. Their enthusiasm for teaching is refreshing. After almost a 20-year absence from college, they helped make the learning experience practical, interesting, and even fun. As an adult returning to a University to better my education, I was excited about the opportunity to challenge myself. The professors at UMass Lowell gave me the opportunity to realize skills I never knew I had."*

— Edward C. Page, Recent Engineering Technology Graduate

UMass Lowell's part-time Engineering Technology degree programs are designed to produce graduates who work with, and are able to manage machines, materials, people and processes for industrial firms all over the world. The University's Civil, Mechanical and Electronic Engineering Technology degrees feature a solid foundation in the tools required for problem solving in today's complex world. Our Engineering Technology programs provide the opportunity to prepare for the future while working full time and studying part time. Our advisors will work with you to evaluate credit courses you've taken elsewhere to see if they can be applied towards our degree programs.

#### Engineering Technology is your path to success...

For more information on our part-time degree programs in Engineering Technology, visit <http://continuinged.uml.edu/engtech>. For a free brochure call 978-934-2143 or email Continuing\_Education@uml.edu

## UNDERGRADUATE DEGREE PROGRAMS

### COLLEGE OF ENGINEERING

#### Associate's Degrees

- Civil Engineering Technology
- Civil Engineering Technology: Water Treatment Option
- Civil Engineering Technology: Wastewater Treatment Option
- Civil Engineering Technology: Surveying Option
- Electronic Engineering Technology
- Mechanical Engineering Technology

#### Bachelor's Degrees

- Civil Engineering Technology
- Civil Engineering Technology: Environmental Option
- Electronic Engineering Technology
- Mechanical Engineering Technology
- Mechanical Engineering Technology: Manufacturing Option
- Mechanical Engineering Technology: Plastics Option

### COLLEGE OF ARTS AND SCIENCES

#### Associate's Degree

- Information Technology

#### Bachelor's Degrees

- Applied Mathematics
- Criminal Justice
- Criminal Justice: Paralegal Option
- Information Technology
- Information Technology: Business Minor
- Liberal Arts
- Mathematics

- Mathematics: Statistics Concentration
- Mathematics: Teacher Concentration

### COLLEGE OF MANAGEMENT

#### Associate's Degree

- Management

#### Bachelor's Degree

- Business Administration



# CUSTOMIZED TRAINING

*Designed to meet your company's business needs*

\* [HTTP://CONTINUINGED.UML.EDU/CORPORATE](http://continuinged.uml.edu/corporate)

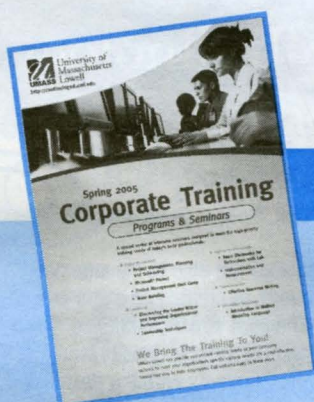
With a large selection of courses and expert instructors, the University of Massachusetts Lowell serves as an important educational resource for companies both nationally and internationally. The University – which is particularly well-known for its Engineering, Information Technology, Computer Science, Health, Management, and Manufacturing programs – provides training to employees on campus and at numerous company locations.

UMass Lowell can develop new programs or courses that feature the industry-specific software and technologies your company uses most!

**Many training areas are available... Call (978) 934-2495 for a free brochure!**

Last year over 51.4 billion dollars was budgeted for formal training in corporations. Millions of dollars are available through workforce training grants. Call us if we can partner with you on a workforce training grant. The University is constantly exploring new models for collaboration with business and industry. By working together with companies to develop cutting-edge training programs, we actively contribute to growing a workforce knowledgeable of industry-relevant technologies.

**Contact us at 978-934-2495 to discuss potential opportunities for program collaboration.**



## ANNOUNCING UMASS LOWELL'S 2005

### Professional Development Corporate Seminars!

*Intensive seminars designed to meet your high priority training needs...*

#### Project Management

**00.613-041 Project Management: BOOT CAMP**  
Meets 9am-4pm;  
May 20, \$250

**00.608-041 Project Management: Planning & Scheduling**  
Meets 6pm-9:30pm;  
May 16, 23, June 6, 13, \$495

**00.610-041 Microsoft® Project**  
Meets 9am-4pm; June 9, 10, \$550

**00.615-041 Team Building**  
One Day Seminar  
Meets 9am-4pm; May 6, \$225

#### Leadership

**00.611-041 Discovering the Leader Within and Improving Organizational Performance**  
Meets 6-9pm; May 18, 25, \$200

**00.612-041 Leadership Techniques**  
Meets 6-9pm; June 1, 8, \$200

#### Communications

**00.601-041 Effective Business Writing**  
Meets 6:30-9:00pm; May 3, 10, 17 \$225

**00.702-041 Web Marketing**  
Meets 6:00-8:00pm; June 2, 9, 16, 23, 30, \$495

#### Engineering Productivity

**00.904-041 Basic Electronics for Technicians w/Lab**  
VA Medical Center, Bedford  
Meets 6-9pm  
May 10, 12, 17, 19, 24, 26, 31, June 2, \$450

**00.905-041 Instrumentation and Measurement**  
VA Medical Center, Bedford  
Meets 6-9pm; May 11, 18, 25, June 1, 8, 15, \$350

#### Information Technology

**00.511-041 Introduction to Unified Modeling Language**  
VA Medical Center, Bedford  
Meets 6-9pm; May 16, 23, June 6, 13, 20, 27 \$595

#### Clinical Lab Sciences

**00.202-041 The Human Genome Project, Stem Cells and Human Cloning**  
Meets 9am-12noon; June 8, \$150

\* Call (978) 934-2405 for a detailed brochure or visit <http://continuinged.uml.edu/corporate>

#### Professional Development Seminars

UMASS LOWELL ANNOUNCES

### PROJECT MANAGEMENT TRAINING SEMINARS



Learn the latest tools and business trends to increase profits and streamline operations

#### Manage Your Project, Budgets and Team More Effectively

In today's technology-driven, fast-paced business environment, there's no time for missed deadlines or outdated software. Effectively managing multiple projects and tight timelines is critical to your bottom line.

Don't miss this opportunity to learn more about the latest tools and business trends that so many successful companies are implementing today. Seminars are held at UMass Lowell's corporate training center in Lowell, MA.

**00.613-041 Project Management: BOOT CAMP**  
Meets 9am-4pm; May 20, \$250

This no frills, hands-on, one day seminar covers the fundamentals of project planning and focuses on the initiation and planning phases of a project.

**00.608-041 Project Management: Planning & Scheduling**  
Meets 6-9:30pm; May 16, 23, June 6, 13, \$495

**00.610-041 Microsoft® Project**  
Meets 9am-4pm; June 9 & 10, \$550

"Microsoft® Project is a powerful project management tool and one that can be intimidating and frustrating to learn. We customize Microsoft Project so students can immediately be effective at planning and managing projects upon completion of the seminar."

For a free Project Management Training brochure call (978) 934-2405 or visit <http://continuinged.uml.edu/corporate> for additional information.

Also see page 15 for our Professional Development Seminars offered in Bedford, MA.

## INTERESTED IN ON-SITE PLASTICS TRAINING?



UMass Lowell is one of the nation's leading universities in plastics. The Plastics Engineering Department has gained worldwide recognition for its state-of-the-art training, research, and experienced faculty who travel nationally and internationally conferring on newly developed concepts and consulting with plastics industry leaders.

Attend our plastics seminars on campus or ask us about having our plastics engineering faculty deliver training on-site to your company! Call 978-934-2144 for information about our on-site training programs!

Call (978) 934-2405 today for a free copy of our 2005 Plastics Seminars & Workshops catalog or visit <http://continuinged.uml.edu/plastics>

Starts May 25th

### NEW! Health Course Offered at Mass Eye & Ear Community Health

Course Number: 30.201-041  
Tuition: \$750 Plus \$30 registration fee  
3 Credits: (open to the public)  
Location: Massachusetts Eye and Ear Infirmary  
Offered: Wednesday evenings from 4-7pm, May 25, 2005.  
Meets for 12 weeks (6 weeks onsite & 6 weeks online)  
Instructor: Nicole Champagne

For questions call 978-934-2495. To register call 978-934-2700



## FIND OUT HOW EASY IT IS TO TAKE A COURSE OR COMPLETE YOUR DEGREE ONLINE!

Looking for our online course listings?

They are now integrated into the Undergraduate & Graduate Course Listings on pages 8-17.

## EARN A MASTER'S DEGREE IN EDUCATION ENTIRELY ONLINE!

UMass Lowell's Graduate School of Education is pleased to announce that it now has two Master's Degrees in Education that are available entirely online: the Master's Degree in Educational Administration and the Master's Degree in Reading and Language. Students may take up to four courses on a non-matriculated basis before applying for admission into the degree program.

The Graduate School of Education has just been informed by the Massachusetts Department of Education that its **Masters Degree Program in Reading and Language has been approved as a Professional License for candidates who hold initial license in elementary teaching, early childhood education, moderate special needs, and English as Second Language.** All of the courses in this program are available online and on campus.

### ALSO COMING THIS FALL New Master's Degree in Education in Curriculum & Instruction

For additional information or an admissions packet, email us!!! [edoffice@uml.edu](mailto:edoffice@uml.edu)

For an online course schedule please visit our website! <http://continuinged.uml.edu/online>

JOIN US AT OUR FREE ONLINE EDUCATION ORIENTATION ON THURSDAY, MAY 12, 2005!  
CALL (978)-934-2474 TO RESERVE YOUR SEAT TODAY.

- \* Graduate & Undergraduate
- \* Fully Accredited \* Affordable Tuition

UMass Lowell's Online Education program allows you to take classes from the convenience of your home or office. Register for one or two courses or pursue a degree or certificate program entirely online.

#### Online Undergraduate Degree Programs

- \* Associate's Degree in Information Technology
- \* Bachelor's Degree in Information Technology
- \* Bachelor's Degree in Information Technology: Business Minor
- \* Bachelor's Degree in Liberal Arts

#### Online Graduate Degree Programs

- NEW!** \* Master's Degree in Reading and Language
- \* Master's Degree in Educational Administration
- \* Master's Degree in Criminal Justice

Coming Soon! Master's Degree in Education in Curriculum & Instruction

#### Online Undergraduate Certificate Programs

- \* Certificate in Contemporary Communications
- \* Certificate in Multimedia Applications
- \* Certificate in UNIX
- \* Certificate in Fundamentals of Information Technology
- \* Certificate in Intranet Development
- \* Certificate in Data/Telecommunications
- \* Certificate in Plastics Engineering Technology
- \* Certificate in Paralegal Studies
- \* Certificate in Security Management and Homeland Security

#### Online Graduate Certificate Programs

- \* Certificate in Clinical Pathology
- \* Certificate in Foundations of Business
- NEW!** \* Certificate in Forensic Criminology
- NEW!** \* Certificate in Domestic Violence Prevention

Call (978) 934-2474 or visit <http://continuinged.uml.edu/online> to test drive an Online course today! The University of Massachusetts System offers additional courses and programs online. Visit [www.UMassOnline.net](http://www.UMassOnline.net) for more details.

Please note: There are no veteran or senior citizens waivers for distance learning courses. Please refer to page 18.



#### ON CAMPUS & ONLINE

### Earn a Master's Degree in Criminal Justice

"According to the Department of Labor, employment in criminal justice is expected to grow faster than the average for all occupations through 2012."

(— Source: <http://bls.gov/oco/ocos160.htm#outlook>)

UMass Lowell's Online Master's Degree Program in Criminal Justice is designed to meet the changing needs of the criminal justice community. By promoting an integrated, academically rigorous, and empirically oriented curriculum, the program helps working criminal justice professionals, and those planning on entering the field, develop the repertoire of professional skills necessary to better manage their current positions, assume leadership roles and/or continue doctoral training in criminal justice.

Also, see our new Undergraduate Certificate in Security Management and Homeland Security (page 4).

For additional information on UMass Lowell's graduate criminal justice programs, please email [CJGradAdvisor@student.uml.edu](mailto:CJGradAdvisor@student.uml.edu) or call 978-934-4106.

**Online Education Course Registration and Confirmation** Students should make sure they have fulfilled the particular course prerequisites prior to registering for a course. To register for a UMass Lowell Online Education course, see the registration form on page 20, or call (978) 934-2700 or toll free (800) 480-3190. Be sure to provide your email address when you register!

**Student Username and Passwords** are assigned online via the Registration Confirmation process. All online students are required to confirm registration online one business day after registering for their online course at <http://continuinged.uml.edu/online>.

**All Online Students** are encouraged to review the Online Education website at <http://continuinged.uml.edu/online> to view course software and textbook requirements, course outlines, chat hours and other course-specific information. Online courses require weekly participation and assignments. Online students can expect to spend 6-10 hours per course each week engaged in course-related activities.

**Student Technical Skills and Requirements** All students new to Online Education should complete the free Online Demonstration course available on the Online Education Website. Some online courses require additional software. Students are responsible for learning to use course-related software before enrolling in a Online Education course. Tutorials are available on the Online Education website.

**Online Course Software Requirements** — Be sure to check our website at <http://continuinged.uml.edu/online> to confirm course software requirements.

For the latest information regarding our online courses and programs, visit our Online Education Website at <http://continuinged.uml.edu/online> or call (978) 934-2474.

### Learn to Teach Online, Without Commuting to Campus.

The **UMass Lowell Online Teaching Institute** will help you develop or enhance your online teaching skills. These instructor-led online courses share the latest techniques in online course development and pedagogy.

#### Introduction to Online Teaching Strategies

00.054-031 June 1 – June 28  
00.054-032 June 29 – August 2

#### Teaching Online with WebCT™

00.055-031 June 29 – August 2  
00.055-032 August 3 – August 30

These non-credit courses are \$395 per person per session; special reduced rate if 4 or more participants attend from the same institution. For course descriptions or more information, call (978) 934-2463 or visit our website <http://continuinged.uml.edu/online/institutes.htm>. To register for a course call (978) 934-2700.

For more information on any of these programs visit our Website at <http://continuinged.uml.edu> or call (978) 934-2474.



# UNDERGRADUATE CREDIT COURSES

## May 23–June 30 Summer Session I

**Day Classes** begin on May 23 and meet Monday through Thursday for 3-credit courses and meet Monday through Friday for 4-credit courses.

**M/W Evening Classes** begin on May 23 and include 3 FRIDAYS: June 3, June 17 and June 24 at the regularly scheduled hours.

**T/Th Evening Classes** begin on May 24 and include 2 FRIDAYS: May 27 and June 10 at the regularly scheduled hours.

*Reminder: This course listing combines the University of Massachusetts Lowell day school courses and the continuing studies courses. It is important to check course numbers and prerequisites to ensure enrollment in the correct class.*

	No.	Title	Days	Time	Cr (Con)	P: Prerequisite C: Corequisite/Comments	Instructor
Accounting	60.201-011	Accounting/Financial	T/Th	6:00-9:00 pm	3		Charles Thompson
	60.201-031	Accounting/Financial (5/23-8/19)	> Online Course		3	Requires access to a PC	Clairmont Carter
	60.202-011	Accounting/Managerial	M/W	6:00-9:00 pm	3	P: 60.201	George Nagler
Art/Computer Graphics	70.230-011	Typography I (2 hr. class; 1 hr. lab)	M-Th	1:00-4:00 pm	3 (6)	P: BFA or Graphic Design certificate candidates	Department Faculty
	70.291-011	Introduction to Graphic Design/ Macintosh	T/Th	6:30-9:30 pm	3	P: Basic Mac familiarity	Alison Poor-Donahue
	70.291-012	Graphic Design I (2 hr. class; 1 hr. lab)	M-Th	8:30-11:30 am	3 (6)	P: BFA or Graphic Design certificate candidates	Department Faculty
	70.379-011	Website Design: Dreamweaver®/ Windows	M/W	6:30-9:30 pm	3	P: 90.238, and 90.231 or 70.262	Chris MacDonald
	NEW! 79.352-011	Aesthetics and Critical Studies of Contemporary Art and Culture	T/Th	7:00-10:00 pm	3		Department Faculty
NOTE: 70.291-011 and 70.379-011 will not directly transfer into the Art Department's Bachelor of Fine Arts Day School degree program. However, certain two-course clusters may be accepted for transfer upon prior department approval. 70.291-012 and 70.230-011 may be transferred into the BFA degree program. CERTIFICATE IN GRAPHIC DESIGN AND DIGITAL IMAGING (See page 4 for required courses.) CERTIFICATE IN WEBSITE DESIGN AND DEVELOPMENT (See page 4 for required courses.)							
Art History	58.203-031	History of Art I: Prehistoric to Medieval (5/23-8/19)	> Online Course		3	AE, HSA, AHD, Cultural Diversity	Liana Cheney
	58.221-011	Twentieth Century Art	M/W	7:00-10:00 pm	3	HSA, AH	Department Faculty
	58.340-031	Woman and Art (5/23-8/19)	> Online Course		3	AE, HSA, AH	Liana Cheney
	58.494-011	Directed Studies	TBA	TBA	3	P: Instructor permission	Liana Cheney
	58.496-011	Practicum in Art History	TBA	TBA	3	P: Instructor permission	Liana Cheney
Biological Sciences	83.101-011	Life Science I	T/Th	6:00-9:00 pm	3	SC	Valerie Graves
	83.214-031	Human Ecology (5/23-8/19)	> Online Course		3	SL	Priscilla Mattson
	83.214-032	Human Ecology (5/23-8/19)	> Online Course		3	SL	Priscilla Mattson
Chemistry	84.101-031	Applied Chemistry for Non-Scientists (5/23-8/19)	> Online Course		3	SL	Philip Lamprey
	84.101-032	Applied Chemistry for Non-Scientists (5/23-8/19)	> Online Course		3	SL	Philip Lamprey
	84.111-011	General Chemistry I	M/W	7:00-10:00 pm	3	C: 84.113; SL	Paul Damour
	84.113-011	General Chemistry Lab I	T/Th	7:00-10:00 pm	1 (3)	C: 84.111; SL	Department Faculty
	84.121-011	Chemistry I	M/W	7:00-10:00 pm	3	C: 84.123; SL	Department Faculty
	84.122-011	Chemistry II	M/W	7:00-10:00 pm	3	P: 84.121; C: 84.124; SL	Department Faculty
	84.123-011	Chemistry Lab I	T/Th	7:00-10:00 pm	1 (3)	C: 84.121; SL	Paul Damour
	84.124-011	Chemistry Lab II	T/Th	7:00-10:00 pm	1 (3)	C: 84.122; SL	Department Faculty
	84.221-011	Organic Chemistry I	M/T/Th	2:45-5:15 pm	3	P: 84.122; C: 84.229	Gene Davis
	84.221-012	Organic Chemistry I	T/Th	7:00-10:00 pm	3	P: 84.122; C: 84.229	Gene Davis
	84.229-011	Organic Chemistry Laboratory IA	M/W	6:00-10:00 pm	1 (4)	C: 84.221	Judith Freeman
	84.229-012	Organic Chemistry Laboratory IA	T/Th	6:00-10:00 pm	1 (4)	C: 84.221	Judith Freeman
Cinema	(See courses listed under Cultural Studies.)						
Civil and Environmental Engineering	14.203-011	Statics (alternate 22.211)	M-Th	3:00-5:00 pm	3	92.132, 95.141, 96.141	Faize Jamil
Client/Server Technology	(See courses listed under Information Technology) CERTIFICATE IN DATABASE MANAGEMENT TECHNOLOGIES (See page 3 for required courses.)						
Computer Science	91.113-031	Exploring the Internet (5/23-8/19)	> Online Course		3	Non-CS Majors only	Patrick Krolak
	94.301-021*	Organization of Programming Languages (5/23-8/26)	Mon	6:00-9:00 pm	3		Krishnan Seetharaman
	94.305-021*	Computer Architecture (5/23-8/26)	Wed	6:00-9:00 pm	3		David Hendrickson
	94.308-021*	Introduction to Operating Systems (5/23-8/26)	Thurs	6:00-9:00 pm	3		Jesus Medina
	94.404-021*	Analysis of Algorithms (5/23-8/26)	Wed	6:00-9:00 pm	3		Mikhail Zelikov
*Requires permission of Graduate Computer Science Coordinator							
Criminal Justice (See also Paralegal Studies)	44.101-011	Introduction to the Criminal Justice System	T/Th	7:00-10:00 pm	3		Joseph Burke
	44.115-061	Introduction to Homeland Security (5/23-7/29)	> Online Course		3		Allan Roscoe
	44.248-061	Terrorism (5/23-7/29)	> Online Course		3		Allan Roscoe
	44.342-061	Criminal Profiling (5/23-7/29)	> Online Course		3		Allan Roscoe
	44.385-061	Criminal Mind and Behavior (5/23-7/29)	> Online Course		3		Alexandria Weida
	44.390-011	Introduction to Research Methods	M/W	6:00-9:00 pm	3		Kristin Sculley
	44.398-011	Statistics in Criminal Justice	M/W	2:45-5:45 pm	3		Kristin Sculley
	CERTIFICATE IN COMMUNITY POLICING CERTIFICATE IN SECURITY MANAGEMENT AND HOMELAND SECURITY (See page 4 for required courses.) CERTIFICATE IN PARALEGAL STUDIES						
Cultural Studies	50.376-011	French Cinema and Society	T/Th	7:00-10:00 pm	3	AHD; conducted in English	Joseph Garreau
	52.335-011	Cinema and Italian Americans	M-Th	10:15 am-12:15 pm	3	VCA; conducted in English	Mario Aste
	52.378-011	Italian Cinema and Culture	M-Th	8:00-10:00 am	3	VCA; conducted in English	Mario Aste
	54.411-031	Hispanic Short Fiction (5/23-8/19)	> Online Course		3	AE; conducted in English; requires MS Word	Francisca Gonzalez-Arias
	59.217-011	Media and Culture in the 20th Century	M/W	7:00-10:00 pm	3		Mark Walters
Economics	49.201-011	Economics I (Microeconomics)	M-Th	8:00-10:00 am	3	P: 90.111; BS	Harjeet Khosla
	49.201-012	Economics I (Microeconomics)	T/Th	6:00-9:00 pm	3	P: 90.111; BS	Ronald Olive
	49.201-031	Economics I (Microeconomics) (5/23-8/19)	> Online Course		3	P: 90.111; BS	Michael Carter
	49.201-032	Economics I (Microeconomics) (5/23-8/19)	> Online Course		3	P: 90.111; BS	Nurul Islam
	49.202-011	Economics II (Macroeconomics)	M/W	6:00-9:00 pm	3	P: 90.111; BS	Patricia Machado



# UNDERGRADUATE CREDIT COURSES

	No.	Title	Days	Time	Cr (Con)	P: Prerequisite C: Corequisite/Comments	Instructor
	49.202-031	Economics II (Macroeconomics) (5/23-8/19)	> Online Course		3	P: 90.111; BS	Michael Carter
	49.202-032	Economics II (Macroeconomics) (5/23-8/19)	> Online Course		3	P: 90.111; BS	Nurul Islam
	49.211-011	Statistics I	M/W	6:00-9:00 pm	3	P: 92.122 or equivalent	Harjeet Khosla
Electrical and Computer Engineering	16.201-011	Circuit Theory I	M/W	12:30-3:30 pm	3	P: 92.132; C: 16.207	Tenneti Rao
	16.207-011	Basic EE I Laboratory	M/W	7:00-10:00 pm	2 (3)	C: 16.201	Frank Tredeau
	16.265-021*	Logic Design (5/23-7/29)	T/Th	10:15 am-12:15 pm	3	P: 25.108 or 91.101	Anh Tran
	16.311-011	Electronics I Laboratory	T/Th	4:00-7:00 pm	2 (3)	P: 16.202; C: 16.365	Alan Rux
	16.362-011	Signals and Systems I	M/W	9:15 am-12:15 pm	3	P: 16.202, 92.236	Mufeed Mah'd
	16.363-021*	Signals and Systems II (5/23-7/29)	T/Th	12:30-2:30 pm	3	P: 16.362	Oliver Ibe
	16.364-011	Engineering Mathematics	T/Th	2:00-5:00 pm	3	P: 92.236, 16.201	Anh Tran
	16.365-011	Electronics I	M/W	1:00-4:00 pm	3	P: 16.202, 95.144, and 92.231 or 92.236; C: 16.311	Craig Armiento
	16.412-011	Directed Studies	TBA	TBA	3	P: Permission of instructor	Ziyad Salameh
	16.413-011	Linear Feedback Systems	T/Th	2:00-5:00 pm	3	P: 16.362, 16.364	Charles Thompson
	16.421-011	Real Time D.S.P.	M/W	2:00-5:00 pm	3	P: 16.362	Mufeed Mah'd
	16.428-011	Alternative Energy Sources	M/W	6:00-9:00 pm	3	P: Permission of instructor	Ziyad Salameh
	16.429-011	Electric Vehicle Technology	T/Th	6:00-9:00 pm	3	P: Permission of instructor	Ziyad Salameh
	16.491-011	Industrial Experience	TBA	TBA	3	P: Permission of instructor	Ziyad Salameh
	Except for asterisked courses, M/W courses include three additional classes on Friday: June 3, June 17, and June 24.						
	Except for asterisked courses, T/Th courses include two additional classes on Friday: May 27 and June 10.						
Electronic Engineering Technology	17.354-011	PSpice Simulation	T/Th	7:00-10:00 pm	2 (3)		James Drew
	CERTIFICATE IN COMPUTER ENGINEERING TECHNOLOGY(See page 4 for required courses.) CERTIFICATE IN ELECTRONICS TECHNOLOGY(See page 4 for required courses.)						
English	42.101-011*	College Writing I	M-Th	8:00-10:00 am	3		William Coughlin
	42.101-031*	College Writing I (5/23-8/19)	> Online Course		3	P: Requires MS Word	Richard Keating
	42.101-032*	College Writing I (5/23-8/19)	> Online Course		3	P: Requires MS Word	William Allen
	42.102-011	College Writing II	M-Th	10:15 am-12:15 pm	3	P: 42.101	William Coughlin
	42.102-012	College Writing II	T/Th	7:00-10:00 pm	3	P: 42.101	Margery Thibodeau
	42.102-031	College Writing II (5/23-8/19)	> Online Course		3	P: 42.101; requires MS Word	Marie Salamone
	42.103-011*	College Writing I for International Students	T/Th	6:00-9:00 pm	3		Jan LaFleur
	42.211-011	Poetry	T/Th	7:00-10:00 pm	3	P: 42.102	Gregoire Turgeon
	42.212-011	The Short Story	M-Th	8:00-10:00 am	3	P: 42.102; LT	Todd Avery
	42.212-031	The Short Story (5/23-8/19)	> Online Course		3	P: 42.102; LT; requires MS Word	Ashmita Khasnabish
	42.217-011	The Horror Story	T/Th	7:00-10:00 pm	3	P: 42.102; LT	Todd Avery
	42.217-031	The Horror Story (5/23-8/19)	> Online Course		3	P: 42.102; LT; requires MS Word	Lisa Mahoney
	42.224-061**	Business Writing (5/23-7/29)	> Online Course		3	P: 42.102; requires MSWord	Nancy Brown
	42.224-062**	Business Writing (5/23-7/29)	> Online Course		3	P: 42.102; requires MS Word	Nancy Brown
	42.226-011**	Technical and Scientific Communication	T/Th	6:00-9:00 pm	3	P: 42.102	Peter Payack
	42.226-031**	Technical and Scientific Communication (5/23-8/19)	> Online Course		3	P: 42.102; requires MS Word	Peter Payack
	42.232-011	Turning Fiction into Film	M/W	7:00-10:00 pm	3	P: 42.102; LT	Dina Bozicas
	42.294-011	History of American Literature I	M-Th	10:15 am-12:15 pm	3	P: 42.102; LT	Madeline Sherlock
	42.302-011	Creative Writing: Fiction	M/W	7:00-10:00 pm	3	P: 42.102	Jay Atkinson
	42.320-011	Personal and Reflective Writing	M-Th	10:15 am-12:15 pm	3	P: 42.102	William Hersey
	NEW! 42.348-011	Modern American Drama	M/W	7:00-10:00 pm	3	P: 42.102; LT	Henry Venuti
	42.403-021	Advanced Software Writing (5/23-8/19)	Tues	6:00-9:15 pm	3	P: 42.402	Stephen Murphy
	*Students will not receive credit for both 42.101 and 42.103.						
	**Students will not receive credit for both 42.224 and 42.226.						
	CERTIFICATE IN TECHNICAL WRITING (See page 4 for required courses.)						
Environmental Science	87.115-011	Astronomy	T/Th	7:00-10:00 pm	3	SL	Arnold O'Brien
	87.117-011	Astronomy Lab	M/W	7:00-9:00 pm	1 (2)	SL	Arnold O'Brien
Graphic Design and Digital Imaging	(See courses listed under Art and Information Technology.) CERTIFICATE IN GRAPHIC DESIGN AND DIGITAL IMAGING (See page 4 for required courses.)						
Health	30.201-031	Community Health (5/23-8/19)	> Online Course		3	Open to all students	Nicole Champagne
	NEW! 30.201-041	Community Health (5/23-8/19)	Wed	4:00-7:00 pm	3	Open to the public	Nicole Champagne
	(Held at Mass Eye & Ear, Boston, MA. Blended course: 6 weeks onsite/6 weeks online)						
	30.306-011	Introduction to Gerontology	M-Th	10:15 am-12:15 pm	3	BS	Judith Conahan
	30.315-011	Kinesiology and Lab	M-F	10:15 am-12:15 pm	4	P: Two semesters each: Anatomy and Physiology, Physics; not open to UMass Lowell Exercise Physiology majors	Department Faculty
	35.101-011	Human Anatomy and Physiology I	T/Th	6:15-9:15 pm	3	C: 35.103; SL	Paul Fierimonte
	35.103-011	Human Anatomy and Physiology I Lab	T/W/Th	2:00-5:00 pm	1 (3)	C: 35.101; SL	Edward Kostek
	36.350-011	Human Biochemistry	M-Th	10:15 am-12:15 pm	3	P: 35.252 or equivalent	Thomas Wilson
	36.414-031	Infectious Disease (5/23-8/19)	> Online Course		3	P: One semester of General Microbiology	S. Fessia-Richardson
	CERTIFICATE IN NUTRITION						
History	43.105-011	Western Civilization to 1715	M-Th	8:00-10:00 am	3	HS	David Cohen
	43.107-031	World History I (5/23-8/19)	> Online Course		3	HS	David Kalivas
	43.108-031	World History II (5/23-8/19)	> Online Course		3	HS	David Kalivas
	43.111-011	U.S. History to 1877	M/W	7:00-10:00 pm	3	HS	Diane Lewis
	43.206-031	American Economic History (5/23-8/19)	> Online Course		3	HS	Joseph Lipchitz
	43.242-031	The Second World War (5/23-8/19)	> Online Course		3	HS; requires proctored exams	Donald Mattheisen
	43.274-031	Native American History (5/23-8/19)	> Online Course		3	HS; requires proctored exams	Diane Lewis
	43.350-011	Colonial America	T/Th	6:30-9:30 pm	3	HS	Harry Hubbard
	43.365-011	Recent U.S. History	T/Th	6:00-9:00 pm	3	HS	Stephen Russell
Information Technology (Including Multimedia and Graphics)	90.160-011	Introduction to Information Systems	M/W	6:00-9:00 pm	3		Christopher Gambon
	90.160-031	Introduction to Information Systems (5/23-8/19)	> Online Course		3		Syama Chaudhuri
	90.160-032	Introduction to Information Systems (5/23-8/19)	> Online Course		3		Syama Chaudhuri
	90.171-031	Applications Software: Access (5/23-8/19)	> Online Course		3	Requires MS® Access 2000 or higher; familiarity with MSWord and MS Excel	Janis Ozimek-Maier
	90.180-031	Applications Software: Excel (5/23-8/19)	> Online Course		3	P: 90.202 or equivalent; requires MS Excel 2005 or higher	Janis Ozimek-Maier
	90.202-011	Introduction to PCs and MS Office	T/Th	6:00-9:00 pm	3	P: Requires MS® Office® XP	Terry Bass
	90.202-031	Introduction to PCs and MS Office (5/23-8/19)	> Online Course		3	P: Requires MS® Office® XP or higher	Robin Desmond
	Free software 90.211-011*	Introduction to Programming with C - Part I	T/Th	7:00-10:00 pm	3	P: No previous prog. experience required	Helen Wang
	Free software 90.211-031	Introduction to Programming with C - Part I (5/23-8/19)	> Online Course		3	P: No previous programming experience required; ANSI C/C++ standard compiler required	James Sears
	Free software 90.212-031*	Introduction to Programming with C - Part II (5/23-8/19)	> Online Course		3	P: 90.211; requires ANSI C/C++ standard compiler	Lisa Panagopoulos
	Free software 90.220-011	Visual Basic®	T/Th	7:00-10:00 pm	3		Leo Javits
	(See page 3 for details.)						



# UNDERGRADUATE CREDIT COURSES

	No.	Title	Days	Time	Cr (Con)	P: Prerequisite C: Corequisite/Comments	Instructor
Free software	90.224-031	Advanced Visual Basic (5/23-8/19)	> Online Course		3	P: 90.220, familiarity with Visual Basic® .NET; requires Visual Studio .NET	Carol Thomas
	90.230-011	Introduction to Multimedia/Windows	T/Th	7:00-10:00 pm	3	P: Basic Mac or Windows proficiency	Chris Perry
	90.230-031	Introduction to Multimedia (5/23-8/19)	> Online Course		3	P: Basic Mac or Windows proficiency; requires eZedia MX software	Rob Graham
	90.231-011	Graphics for Multimedia and the World Wide Web/Windows	M/W	6:30-9:30 pm	3	P: 90.230	Marina Javits
	90.231-031	Graphics for Multimedia and the World Wide Web/Windows (5/23-8/19)	> Online Course		3	P: 90.230; requires Photoshop 5.0 or higher; access to a scanner	Randy Howe
	90.232-021	Desktop Video Production (5/23-8/19) (Blended course: 6 weeks on campus/6 weeks online)	Wed	7:00-10:15 pm	3	P: 90.230; access to a scanner or digital camera; USB thumb drive	Michael Lucas
	90.238-021	Website Development: Front Page/Windows (5/23-8/19)	Mon	6:30-10:00 pm	3	P: 90.291; 90.231 recommended	Jamie Manning
	90.238-031	Website Development: Front Page/Windows (5/23-8/19)	> Online Course		3	P: 90.291; 90.231 recommended; requires MS FrontPage 2003 (Academic Version ok)	Judith Feeney
	90.247-031	Web Authoring: Flash (5/23-8/19)	> Online Course		3	P: 90.291, 90.302 or prog. familiarity; requires Macromedia Flash MX or higher	Michael Murie
Free software	90.267-011*	C Programming	M/W	7:00-10:00 pm	3	P: Previous programming experience	Helen Wang
	90.267-041*	C Programming	T/Th	6:00-9:00 pm	3	P: Previous programming experience	Nancy Kiernan
	90.267-061*	(Held at Veterans Administration Medical Conference Center, Bedford, MA) C Programming (5/23-7/29)	> Online Course		3	P: Previous programming experience; requires Ansi C/C++ compiler software	Timothy Niesen
	90.267-062*	C Programming (5/23-7/29)	> Online Course		3	P: Previous programming experience; requires Ansi C/C++ compiler software	Timothy Niesen
Free software	90.268-011	C++ Programming	M/W	7:00-10:00 pm	3	P: 90.267 or 90.212	Thomas Kostizak
Free software	90.268-031	C++ Programming (5/23-8/19)	> Online Course		3	P: 90.267 or 90.212; requires C++ compiler software	Mark Hertel
Free software	90.269-031	Advanced C++ (5/23-8/19)	> Online Course		3	P: 90.268, experience with Data Structures; requires C++ compiler software	Mark Hertel
Free software	90.271-011	C# (C Sharp)	T/Th	7:00-10:00 pm	3	P: 90.268 or 90.301	James Brzowski
	90.291-031	Introduction to DHTML (5/23-8/19)	> Online Course		3		William Dubie
	90.292-031	Advanced DHTML (5/23-8/19)	> Online Course		3	P: 90.291	Isobel Davis
	90.297-011	Introduction to Java Programming	M/W	7:00-10:00 pm	3	P: Previous prog. experience required	James Brzowski
	90.297-031	Introduction to Java Programming (5/23-8/19)	> Online Course		3	P: Previous programming experience required; Sun Java Development Kit required	Lance Smith
	90.301-011	Java™ Programming/Windows	T/Th	7:00-10:00 pm	3	P: 90.297 or 90.268	Peter Weston
	90.301-031	Java™ Programming/Windows (5/23-8/19)	> Online Course		3	P: 90.297 or 90.268	Department Faculty
	90.302-031	JavaScript	> Online Course		3	P: 90.291 or knowledge of HTML	David Sciuto
	90.303-031	Advanced Java Programming (5/23-8/19)	> Online Course		3		Fred Yao
	90.305-031	Introduction to Perl (5/23-8/19)	> Online Course		3	P: 90.267	Gregory Rushton
	90.306-031	Introduction to XML (5/23-8/19)	> Online Course		3	P: 90.291 and 90.474; requires XML Altova's XMLSpy Home Version	David Sciuto
	90.311-011	Introduction to the UNIX® Operating System	T/Th	7:00-10:00 pm	3		Andrew Garside
	90.311-031	Introduction to the UNIX Operating System (5/23-8/19)	> Online Course		3		Fred Vegliante
	90.312-011	UNIX® Shell Programming	T/Th	7:00-10:00 pm	3	P: 90.311, and 90.267 or 90.212	Sean McGowan
	90.312-031	UNIX Shell Programming (5/23-8/19)	> Online Course		3	P: 90.311, and 90.267 or 90.212	Michael Richards
	90.316-031	UNIX System Administration (5/23-8/19)	> Online Course		3	P: 90.312	
	90.319-031	Introduction to Linux® Programming (5/23-8/19)	> Online Course		3	P: Requires Fedora (Install Core 2 or higher)	Justin Seiferth
	90.321-031	Linux System Administration (5/23-8/19)	> Online Course		3	P: Shell Scripting experience; required software included with text	Barbara Bancroft
Free software	90.360-031	Introduction to Data Structures Using C (5/23-8/19)	> Online Course		3	P: 90.364, and 90.267 or 90.212; requires Ansi C/C++ compiler software	Isobel Davis
Free software	90.364-011	Problem Solving with C	M/W	7:00-10:00 pm	3	P: 90.212 or 90.267	Lisa Panagopoulos
Free software	90.364-031	Problem Solving with C (5/23-8/19)	> Online Course		3	P: 90.212 or 90.267; requires Ansi C/C++ software	Sean McGowan
Free software	90.443-011	Fundamentals of Client/Server Computing	T/Th	6:00-9:00 pm	3		Umesh Bhargava
	90.450-021	Database Administration I: Oracle 10g (5/23-8/19)	Thurs	7:00-10:15 pm	3	P: 90.474	Michael Cummings
	90.453-021	Database Administration II: Advanced Oracle 10g (5/23-8/19)	Tues	7:00-10:15 pm	3	P: 90.474	Jeffrey Yang
	90.457-031	Network Security (5/23-8/19)	> Online Course		3	P: 90.462; Junior status or instructor permission	Tak Yin Wong
	90.459-021	Introduction to Oracle 10g PL/SQL (5/23-8/19)	Wed	7:00-10:15 pm	3	P: 90.474	Leon Xia
	90.460-031	Computer Ethics (5/23-8/19)	> Online Course		3	VC	Paul Giguere
	90.461-011	LAN/WAN Technologies	T/Th	6:00-9:00 pm	3	P: 90.267 or previous prog. experience	Jaime Fernandez
	90.461-031	LAN/WAN Technologies (5/23-8/19)	> Online Course		3	P: 90.267 or previous prog. experience	Ed Barnes
	90.462-011	TCP/IP and Network Architecture	M/W	6:00-9:00 pm	3	P: 90.461	Arvind Kukreja
	90.462-031	TCP/IP and Network Architecture (5/23-8/19)	> Online Course		3	P: 90.461	Ed Barnes
	90.463-011	Advanced Networking Technology	M/W	7:00-10:00 pm	3	P: 90.461	Krishnaje Putcha
Free software	90.464-031	Network Management (5/23-8/19)	> Online Course		3	P: 90.461	Jaime Fernandez
	90.474-021	Relational Database Concepts (5/23-8/19)	Thurs	7:00-10:15 pm	3	P: 90.267	Robert Demers
Free software	90.474-031	Relational Database Concepts (5/23-8/19)	> Online Course		3	P: 90.267	Paul Giguere
	90.480-031	Project-Based Information Systems (5/23-8/19)	> Online Course		6	P: Junior status; can be used to replace the sequence of 90.477 and 90.478; requires MS Power Point	Jon Forsyth
	90.480-032	Project-Based Information Systems (5/23-8/19)	> Online Course		6	P: Junior status; can be used to replace the sequence of 90.477 and 90.478	Jon Forsyth
	90.483-041	Wireless Communications (Held at Veterans Admin. Medical Conference Center, Bedford, MA)	T/Th	7:00-10:00 pm	3	P: 90.463 or a strong background in the area of telecommunications networking	Krishnaje Putcha

\*Students will not receive credit for both 90.267 and the 90.211/90.212 sequence.  
CERTIFICATE IN DATABASE MANAGEMENT TECHNOLOGIES (See page 3 for required courses.)  
CERTIFICATE IN CONTEMPORARY COMMUNICATIONS  
CERTIFICATE IN DATA/TELECOMMUNICATIONS (See page 3 for required courses.)  
CERTIFICATE IN FUNDAMENTALS OF INFORMATION TECHNOLOGY (See page 3 for required courses.)  
CERTIFICATE IN INTRANET DEVELOPMENT (See page 3 for required courses.)  
CERTIFICATE IN MULTIMEDIA APPLICATIONS (See page 4 for required courses.)  
CERTIFICATE IN UNIX (See page 3 for required courses.)  
CERTIFICATE IN WEBSITE DESIGN AND DEVELOPMENT (See page 3 for required courses.)

Free software (See page 3 for details.)



# UNDERGRADUATE CREDIT COURSES

	No.	Title	Days	Time	Cr (Con)	P: Prerequisite C: Corequisite/Comments	Instructor
Languages	50.211-011	Intermediate Conversational French I	M/W	7:00-10:00 pm	3	P: 50.102 or equivalent	Joseph Garreau
	50.376-011	French Cinema and Society	T/Th	7:00-10:00 pm	3	AHD; conducted in English	Joseph Garreau
	52.335-011	Cinema and Italian Americans	M-Th	10:15 am-12:15 pm	3	VCA; conducted in English	Mario Aste
	52.378-011	Italian Cinema and Culture	M-Th	8:00-10:00 am	3	VCA; conducted in English	Mario Aste
	54.101-011	Beginning Spanish I	M-Th	8:00-10:00 am	3		J. Heli Hernandez
	54.101-012	Beginning Spanish I	M/W	7:00-10:00 pm	3		Francisca Gonzalez-Arias
	54.211-011	Intermediate Conversational Spanish I	M-Th	10:15 am-12:15 pm	3	P: 54.102 or equivalent	J. Heli Hernandez
	54.211-012	Intermediate Conversational Spanish I	T/Th	7:00-10:00 pm	3	P: 54.102 or equivalent	Kimberly Vitchkoski
	54.411-031	Hispanic Short Fiction (5/23-8/19)	> Online Course		3	AE; conducted in English	Francisca Gonzalez-Arias
	CERTIFICATE IN SPANISH						
Legal Studies (See also Paralegal Studies)	41.363-011	Corporate and Property Law	T/Th	7:00-10:00 pm	3		Eugene Reardon
	41.365-011	The Legal Environment of Business	M/W	7:00-10:00 pm	3		Paul King
	41.370-031	Real Estate Law (5/23-8/19)	> Online Course		3		Patricia Talty
	41.376-011	Family Law	M/W	7:00-10:00 pm	3		Russell Karl
	41.381-011	Women and the Law	M/W	7:00-10:00 pm	3		Donna Zils Banfield
	41.381-031	Women and the Law (5/23-8/19)	> Online Course		3		Donna Zils Banfield
	41.387-031	Legal Research Methods (5/23-8/19)	> Online Course		3	Law library access required	Martha Lipchitz
	41.390-031	Litigation (5/23-8/19)	> Online Course		3		Ellen Curran
	41.497-011	Paralegal Practicum	TBA	TBA	3	P: Minimum of three paralegal courses and permission of Prof. William Burke, Coordinator, Legal Studies; call (978) 934-2765	William Burke
	CERTIFICATE IN PARALEGAL STUDIES						
Management	61.300-011	Investments	M/W	6:00-9:00 pm	3	P: 60.201, COM filter courses, Junior standing, BSBA students and College of Management Dean permission	Frank Andrews
	61.301-011	Business Finance	T/Th	6:00-9:00 pm	3	P: 60.201, 49.201, 49.202, COM filter courses, BSBA majors or Business Minor/BSIT/ASIT with 54+ credits and College of Management Dean permission	Frank Andrews
	61.301-061	Business Finance (5/23-7/15) (includes week of Fourth of July)	> Online Course		3	P: 60.201, 49.201, 49.202, COM filter courses, BSBA majors or Business Minor/BSIT/ASIT with 54+ credits and College of Management Dean permission	Yash Puri
	62.201-061	Marketing Principles (5/23-7/15) (includes week of Fourth of July)	> Online Course		3	P: 47.101, 48.101, 49.201; requires proctored exams	Duncan LaBay
	63.210-011	Operations Analysis Techniques	M/W	8:00-11:00 am	3	P: 49.211	M. Riaz Khan
	63.301-061	Management Information Systems (5/23-7/15) (includes week of Fourth of July)	> Online Course		3	P: COM filter courses, BSBA majors or Business minor/BSIT/ASIT with 54+ credits and College of Management Dean; requires proctored exams	David Lewis
	66.301-061	Organizational Behavior (5/23-7/15) (includes week of Fourth of July)	> Online Course		3	P: COM filter courses, BSBA majors or Business minor/BSIT/ASIT with 54+ credits and College of Management Dean permission; requires proctored exams	Stuart Freedman
	66.490-011	Strategic Management	T/Th	9:00 am-Noon	3	P: Graduating seniors only; BSBA students and College of Mgmt. Dean permission	Ashwin Mehta
Mathematics	90.111-011*	Fundamentals of Algebra	T/Th	7:00-10:00 pm	3		Anthony Sokolowski
	92.111-011*	Quantitative Reasoning	M-Th	10:15 am-12:15 pm	3	P: Two years of high school algebra; Liberal Arts majors only; no credit toward a degree in science or engineering; MA	Alan Kaplan
	92.121-011**	Precalculus Mathematics	M-Th	8:00-10:00 am	3	P: 90.111 or equivalent or satisfactory score on the Math Placement Exam given the first evening of class	Alan Kaplan
	92.121-012**	Precalculus Mathematics	T/Th	6:30-9:30 pm	3	P: 90.111 or equivalent or satisfactory score on the Math Placement Exam given the first evening of class	Candice Weston
	92.121-031**	Precalculus Mathematics (5/23-8/19)	> Online Course		3	P: 90.111 or equivalent; MA; designed for students who can work independently in math; may require proctored exams	Alan Doerr
	92.122-011	Management Calculus	M-Th	10:15 am-12:15 pm	3	P: 92.119 or 92.121 or equivalent; not for science or engineering majors; MA	Alexander Olsen
	92.122-012	Management Calculus	M/W	6:00-9:00 pm	3	P: 92.119 or 92.121 or equivalent; not for science or engineering majors; MA	Patricia Gifford
	92.125-011	Calculus A	T/Th	6:00-9:00 pm	3	P: 92.123; MA	Cynthia Hill
	92.126-011	Calculus B	M/W	6:00-9:00 pm	3	P: 92.125; MA	Robert Johnson
	92.131-021	Calculus I (5/23-8/19)	M/W/F	8:00-10:00 am	4	MA	John Lahoud
	92.131-022	Calculus I (5/23-8/19)	M/W/F	10:15 am-12:15 pm	4	MA	John Lahoud
	92.132-021	Calculus II (5/23-8/19)	M/W/F	8:00-10:00 am	4	P: 92.131; MA	Marvin Stick
	92.132-022	Calculus II (5/23-8/19)	M/W/F	10:15 am-12:15 pm	4	P: 92.131; MA	Marvin Stick
	92.151-011	Explorations in Mathematics	M/W	6:30-9:30 pm	3	Liberal Arts majors only; MA	Department Faculty
	92.183-011	Introduction to Statistics	M-Th	8:00-10:00 pm	3	P: 90.111 or equivalent; MA	Department Faculty
	92.183-012	Introduction to Statistics	M/W	6:00-9:00 pm	3	P: 90.111 or equivalent; MA	Alexander Olsen
	92.183-031	Introduction to Statistics (5/23-8/19)	> Online Course		3	P: 90.111 or equivalent; MA	Ann Marie Hurley
	92.183-032	Introduction to Statistics (5/23-8/19)	> Online Course		3	P: 90.111 or equivalent; MA	Ann Marie Hurley
	92.225-011	Calculus C	T/Th	6:00-9:00 pm	3	P: 92.126; MA	Philip Breen
	92.226-011	Calculus D	M/W	6:00-9:00 pm	3	P: 92.225	Rida Mirie
	92.231-011	Calculus III	M-F	10:15 am-12:15 pm	4	P: 92.132	Vidhu Prasad
	92.234-011	Differential Equations	M-Th	8:00-10:00 am	3	P: 92.225 or 92.132	Vidhu Prasad
	92.234-012	Differential Equations	T/Th	6:00-9:00 pm	3	P: 92.225 or 92.132	Rida Mirie
	92.321-011	Discrete Structures I	T/Th	3:00-6:00 pm	3	P: 90.112 or 92.121	Department Faculty
	92.321-012	Discrete Structures I	M/W	6:00-9:00 pm	3	P: 90.112 or 92.121	Anthony Penta
	92.321-031	Discrete Structures I (5/23-8/19)	> Online Course		3	P: 90.112 or 92.121; designed for students who can work independently in math; may require proctored exams	Alan Doerr
	92.322-011	Discrete Structures II	M-Th	10:15 am-12:15 pm	3	P: 92.321	Alan Doerr
	92.363-011	Introduction to Data Analysis	M-Th	10:15 am-12:15 pm	3	P: 92.183 or equivalent; MA	Department Faculty
	92.386-011	Statistics for Science and Engineering	M/W	6:00-9:00 pm	3	P: 92.225 or 92.132	Chittur Venkatesh
	92.407-011	Probability and Mathematical Statistics I	M/W	6:00-9:00 pm	3	P: 92.126 or 92.132 or equivalent	Chittur Venkatesh
	92.419-031	Introduction to Mathematica® (5/23-8/19)	> Online Course		3	Requires Mathematica 4.0 or higher	Kenneth Levaseur
	92.435-011	History of Mathematics	T/Th	6:00-9:00 pm	3	Three semesters of calculus	Joyce Williams
	92.466-011	Statistical Programming Using SAS	T/Th	6:00-9:00 pm	3	P: 92.385 or equivalent	Paula Wolk
	*Fundamentals of Algebra (90.111) is a preparatory course and cannot be credited toward a degree program at the University of Massachusetts Lowell.						
	**Students will not receive credit for both 90.112 and 92.121. For students in the Information Systems Program, 92.121 can be substituted for the combination of 90.112 and 90.119.						
	University of Massachusetts Lowell day students must have approval from their Department Chairperson before taking courses with a 90 prefix.						
	Many 500-level courses are well within the grasp of upper level undergraduates and may be used as electives. Contact the Graduate School for course listings and admissions procedures.						
Mechanical Engineering	22.211-011	Statics (alternate 14.203)	M-Th	3:00-5:00 pm	3	P: 92.132, 95.141	Faize Jamil
	22.381-011	Fluid Mechanics	T/Th	7:00-10:00 pm	3	P: 22.213, 92.231, 92.234 or 92.236	John Colluccini



# UNDERGRADUATE CREDIT COURSES

	No.	Title	Days	Time	Cr (Con)	P: Prerequisite C: Corequisite/Comments	Instructor
<b>Mechanical Engineering Technology</b>	CERTIFICATE IN COMPUTER-ASSISTED MANUFACTURING (See page 4 for required courses.) CERTIFICATE IN MANUFACTURING TECHNOLOGY						
<b>Multimedia Applications</b>	(See courses listed under Information Technology.) CERTIFICATE IN MULTIMEDIA APPLICATIONS (See page 4 for required courses.)						
<b>Music</b>	71.102-011	Music Theory 2	M-Th	8:00-10:00 am	3	P: 71.101	Lisa Cleveland
	71.104-011	Aural Skills 2	M-Th	10:15-11:35 am	1 (2)	P: 71.103	Lucy DeSa
	71.201-011	Music Theory 3	M-Th	10:15 am-12:15 pm	3	71.102	Lisa Cleveland
	71.203-011	Aural Skills 3	M-Th	8:00-9:20 am	1 (2)	P: 71.102	Lucy DeSa
	77.499-021	Music Business Internship (5/23-8/19)	TBA	TBA	6	P: Permission of Chair	Alan Williams
	78.493-021	Internship in Sound Recording Technology (5/23-8/19)	TBA	TBA	6	P: Permission of Chair	William Moylan
<b>Paralegal Studies (See also also Legal Studies)</b>	41.363-011	Corporate and Property Law	T/Th	7:00-10:00 pm	3		Eugene Reardon
	41.370-031	Real Estate Law (5/23-8/19)	> Online Course		3		Patricia Talty
	41.376-011	Family Law	M/W	7:00-10:00 pm	3		Russell Karl
	41.387-031	Legal Research Methods (5/23-8/19)	> Online Course		3	Law library access required	Martha Lipchitz
	41.390-031	Litigation (5/23-8/19)	> Online Course		3		Ellen Curran
	41.497-011	Paralegal Practicum	TBA	TBA	3	P: Minimum of three paralegal courses and permission of Prof. William Burke, Coordinator, Legal Studies; call	William Burke
	CERTIFICATE IN PARALEGAL STUDIES		(978) 934-2765				
<b>Philosophy</b>	45.201-011	Introduction to Philosophy	T/Th	6:00-9:00 pm	3	VC, AHE	Michael Koran
	45.201-031	Introduction to Philosophy (5/23-8/19)	> Online Course		3	VC, AHE; requires proctored exams	Donald LeBlanc
	45.202-011	Introduction to Logic	T/Th	7:00-10:00 pm	3	VC, AHE	James Hart
	45.203-011	Introduction to Ethics	M/W	7:00-10:00 pm	3	VC, AHDE	Donald LeBlanc
	CERTIFICATE IN CONTEMPORARY COMMUNICATIONS (See page 3 for required courses.)						
<b>Physics</b>	95.103-011	General Physics I	M-Th	8:00-10:00 am	3	C: 96.103; SL	Arthur Mittler
	95.141-011	Physics I	M-F	8:00-10:00 am	3 (4)	C: 92.131, 96.141; SL	F. Raymond Hardy
	95.144-011	Physics II	M-F	8:00-10:00 am	3 (4)	P: 95.141. C: 92.132, 96.144; SL	Kunnat Sebastian
	96.103-011	General Physics I Lab (2 days/week)	T/Th	1:00-4:00 pm	1 (2)	C: 95.103 or 95.201; SL	Arthur Mittler
	96.141-011	Physics I Lab (2 days/week)	M/W	1:00-4:00 pm	1 (2)	C: 95.141; SL	F. Raymond Hardy
	96.144-011	Physics II Lab (2 days/week)	T/Th	1:00-4:00 pm	1 (2)	P: 96.141. C: 95.144; SL	David Pullen
	99.101-011	Radiation and Life	M/W	6:00-9:00 pm	3	C: 99.102; SL	Anthony Stevens
	99.102-011	Radiation and Life Lab	M/W	3:30-5:30 pm	1 (2)	Prerequisite or Corequisite: 99.101; SL	Anthony Stevens
<b>Plastics</b>	27.451-011	Selected Topics I	M/W	7:00-10:00 pm	3	P: Coordinator permission	Department Faculty
	27.453-011	Selected Topics III	T/Th	7:00-10:00 pm	3	P: Coordinator permission	Department Faculty
	NOTE: Courses with the 27 prefix are not eligible for graduate credit. CERTIFICATE IN PLASTICS ENGINEERING TECHNOLOGY						
<b>Political Science</b>	46.101-011	Introduction to American Politics	T/Th	7:00-10:00 pm	3	BS/SS	Francis Talty
	46.110-011	Introduction to Politics	M-Th	10:15 am-12:15 pm	3	BS/SSD	George Anthes
	46.230-011	Introduction to Law and the Legal System	T/Th	7:00-10:00 pm	3		Patricia Talty
	NEW! 46.318-011	Politics and Advertising	M-Th	12:30-2:30 pm	3		John Powers
<b>Psychology</b>	47.101-011	General Psychology	T/Th	6:30-9:30 pm	3	BS	John Kendrick
	47.101-061	General Psychology (5/23-7/29)	> Online Course		3	BS; requires MS Word	Meredith Stanford-Pollock
	47.101-062	General Psychology (5/23-7/29)	> Online Course		3	BS; requires MS Word	Meredith Stanford-Pollock
	47.232-031	Psychology of Personality (5/23-8/19)	> Online Course		3	BS; requires MS Word	Joan Cannon
	47.255-001	Community Psychology	M-Th	10:15 am-12:15 pm	3	P: 47.101; BS	Sharon Wasco
	47.260-011	Human Development I	M/W	6:00-9:00 pm	3	BS	Patricia Trela
	47.272-011	Abnormal Psychology	T/Th	6:00-9:00 pm	3	P: 47.101; BS	Marc Wilson
	47.273-011	Brain, Mind and Behavior	M-Th	8:00-10:00 am	3	P: 47.101	Mary Duell
	47.312-031	Learning and Behavior (5/23-8/19)	> Online Course		3	P: 47.101; BS	Charlotte Mandell
	47.328-011	Dynamics of Interpersonal Relations	M/W	6:00-9:00 pm	3	P: 47.101; BS	Noel Cartwright
	47.351-031	Human Sexuality (5/23-8/19)	> Online Course		3	P: 47.101; BS	Mary Duell
	47.361-011	Problem and Issues in Childhood and Adolescence	T/Th	6:00-9:00 pm	3	P: 47.101, 47.260	Doreen Arcus
	47.475-011	Seminar: Clinical Psychology	T/Th	2:45-5:45 pm	3	P: 47.232 or 47.272 or instructor permission	Peter Hantzis
	47.477-031	Seminar: Contemporary Trends-Addictions (5/23-8/19)	> Online Course		3	P: 47.101; other prerequisites may be specified by the instructor; requires MS Word	Richard Siegel
<b>Regional Economic and Social Development</b>	57.475-011	Community Conflict Resolution	T/Th	6:00-9:00 pm	3		David Turcotte
<b>Sociology</b>	48.101-011	Introduction to Sociology	M-Th	8:00-10:00 am	3	BS	Levon Chorbajian
	48.234-011	Study of Minorities	T/Th	7:00-10:00 pm	3	P: 48.101	Chris Cass
	48.255-011	Sociology of Deviance	M-Th	10:15 am-12:15 pm	3	P: 48.101	Daniel Egan
	48.260-011	Sociology of Mass Media	M/W	7:00-10:00 pm	3	P: 48.101; Human Values, BSV	Levon Chorbajian
	48.276-011	Sociology of the Gun	M/W	7:00-10:00 pm	3	P: 48.101	Chris Cass
	48.351-031	The Sociology of Health and Health Care (5/23-8/19)	> Online Course		3	P: 48.101	John Ost
	48.361-011	Sociology of Law	M-Th	12:30-2:30 pm	3	P: 48.101	Daniel Egan
<b>Technical Writing</b>	42.403-021	Advanced Software Writing (5/23-8/19)	Tues	6:00-9:15 pm	3	P: 42.402	Stephen Murphy
	CERTIFICATE IN TECHNICAL WRITING (See page 4 for required courses.) Technical Writing courses are open to undergraduate and graduate students.						
<b>Water/Wastewater Option</b>	(See courses listed under Civil Engineering Technology: Water/Wastewater Option) CERTIFICATE IN WASTEWATER TREATMENT CERTIFICATE IN WATER TREATMENT						
<b>Website Design and Development</b>	(See courses listed under Information Technology.) CERTIFICATE IN WEBSITE DESIGN AND DEVELOPMENT (See page 4 for required courses.)						
<b>Women's Studies</b>	41.381-011	Women and the Law	M/W	7:00-10:00 pm	3		Donna Zils Banfield
	41.381-031	Women and the Law (5/23-8/19)	> Online Course		3		Donna Zils Banfield
	58.340-031	Woman and Art (5/23-8/19)	> Online Course		3	AE, HSA, AH	Liana Cheney



## July 11–August 19 Summer Session II

**Day Classes** begin on July 11 and meet Monday through Thursday for 3-credit courses and meet Monday through Friday for 4-credit courses.

**M/W Evening Classes** begin on July 11 and include 2 FRIDAYS: July 22 and August 5 at the regularly scheduled hours.

**T/Th Evening Classes** begin on July 12 and include 2 FRIDAYS: July 29 and August 12 at the regularly scheduled hours.

*Reminder: This course listing combines the University of Massachusetts Lowell day school courses and the continuing studies courses. It is important to check course numbers and prerequisites to ensure enrollment in the correct class.*

	No.	Title	Days	Time	Cr (Con)	P: Prerequisite C: Corequisite/Comments	Instructor
<b>Accounting</b>	60.202-021	Accounting/Managerial	T/Th	6:00-9:00 pm	3	P: 60.201	Laura Christianson
<b>Art/Computer Graphics</b>	70.231-021	Typography II (2 hr. class; 1 hr. lab)	M-Th	1:00-4:00 pm	3 (6)	P: 70.230	Department Faculty
	70.262-021	Digital Imaging and Photography: Photoshop (Windows®)	M/W	6:30-9:30 pm	3	P: Basic Windows proficiency	Ella Carlson
	70.379-021	Website Design/Mac (2 hr. class; 1 hr. lab)	M-Th	8:30-11:30 am	3 (6)	P: 70.265 or Coordinator permission	Department Faculty
	70.379-022	Website Design: Dreamweaver®/Windows	T/Th	7:00-10:00 pm	3	P: 90.238, and 90.231 or 70.262	Chris Perry
NOTE: 70.245-021, 70.262-021, and 70.379-022 will not directly transfer into the Art Department's Bachelor of Fine Arts Day School degree program. However, certain two-course clusters may be accepted for transfer upon prior department approval. 70.231-021 and 70.379-021 may be transferred into the BFA degree program.							
<b>Art History</b>	58.101-021	Art Appreciation	M/W	7:00-10:00 pm	3	AE, HSA, AHD, Cultural Diversity	Marie Frank
	58.494-021	Directed Studies	TBA	TBA	3	P: Art History Coordinator permission	Liana Cheney
	58.496-021	Practicum in Art History	TBA	TBA	3	P: Art History Coordinator permission	Liana Cheney
<b>Chemistry</b>	84.112-021	General Chemistry II	M/W	7:00-10:00 pm	3	P: 84.111 or permission of instructor; C:84.114; SL	Department Faculty
	84.114-021	General Chemistry II Lab	T/Th	7:00-10:00 pm	1 (3)	P: 84.113 or permission of instructor; C: 84.112; SL	Athena Letsou
	84.122-021	Chemistry II	M/W	7:00-10:00 pm	3	P: 84.121 and 84.123. C: 84.124; SL	Department Faculty
	84.124-021	Chemistry Lab II	T/Th	7:00-10:00 pm	1 (3)	P: 84.123; C: 84.122; SL	Paul Damour
	84.222-021	Organic Chemistry II	M/T/Th	2:45-5:15 pm	3	P: 84.221. C: 84.230; SL	Gene Davis
	84.222-022	Organic Chemistry II	T/Th	7:00-10:00 pm	3	P: 84.221. C: 84.230; SL	Gene Davis
	84.230-021	Organic Chemistry Lab II A	T/Th	6:00-10:00 pm	1 (4)	P: 84.229; C: 84.222; SL	Judith Freeman
	84.230-022	Organic Chemistry Lab II A	M/W	6:00-10:00 pm	1 (4)	P: 84.229. C: 84.222; SL	Judith Freeman
<b>Cinema</b>	(See courses listed under Cultural Studies.)						
<b>Civil and Environmental Engineering</b>	14.204-021	Strength of Materials (alternate 22.212)	M-Th	8:00-10:00 am	3	P: 14.203	Faize Jamil
	14.205-021	Dynamics (alternate 22.213)	M/W	7:00-10:00 pm	3	P: 14.203, 92.132	Faize Jamil
<b>Client/Server Technology</b>	(See courses listed under Information Technology) CERTIFICATE IN DATABASE MANAGEMENT TECHNOLOGY (See page 3 for required courses.)						
<b>Computer Science</b>	91.113-021	Exploring the Internet	M/W	6:00-9:00 pm	3	Non-CS Majors only	Michael Krolak
<b>Criminal Justice (See also Paralegal Studies)</b>	44.261-021	Juvenile Delinquency	M/W	6:00-9:00 pm	3		Steven Sacco
CERTIFICATE IN COMMUNITY POLICING CERTIFICATE IN SECURITY MANAGEMENT AND HOMELAND SECURITY (See page 4 for required courses.) CERTIFICATE IN PARALEGAL STUDIES							
<b>Cultural Studies</b>	50.378-021	Images of Women in French Cinema	T/Th	7:00-10:00 pm	3	AHD; conducted in English	Joseph Garreau
	52.374-021	Classics of Italian Cinema	M-Th	10:15 am-12:15 pm	3	VCA; conducted in English	Mario Aste
	52.380-021	Italian Cinema: Directors and Themes	M-Th	8:00-10:00 am	3	VCA; conducted in English	Mario Aste
	58.101-021	Art Appreciation	M/W	7:00-10:00 pm	3	AE, HSA, AHD, Cultural Diversity	Marie Frank
<b>Economics</b>	49.201-021	Economics I (Microeconomics)	M-Th	8:00-10:00 am	3	P: 90.111; BS	Ronald Olive
	49.201-022	Economics I (Microeconomics)	T/Th	6:00-9:00 pm	3	P: 90.111; BS	Ronald Olive
	49.202-021	Economics II (Macroeconomics)	M/W	7:00-10:00 pm	3	P: 90.111; BS	Patricia Machado
	49.211-021	Statistics I	M/W	6:00-9:00 pm	3	P: 92.122 or equivalent	Harjeet Khosla
<b>Electrical and Computer Engineering</b>	16.202-021	Circuit Theory II	T/Th	9:15 am-12:15 pm	3	P: 16.201; C: 16.208	Tenneti Rao
	16.208-021	Basic EE II Laboratory	T/Th	4:00-7:00 pm	2 (3)	P: 16.207; C: 16.202	Frank Tredeau
	16.312-021	Electronics II Laboratory	T/Th	4:00-7:00 pm	2 (3)	P: 16.311; C 16.366	Nicholaos Limperopoulos
	16.360-021	Electromagnetic Theory I	M/W	2:00-5:00 pm	3	P: 16.202	Dikshitulu Kalluri
	16.366-021	Electronics II	T/Th	9:00 am-Noon	3	P: 16.365; C 16.312	Mufeed Mah'd
	16.412-021	Directed Studies	TBA	TBA	3	P: Permission of instructor	Ziyad Salameh
	16.491-021	Industrial Experience	TBA	TBA	3	P: Permission of instructor	Ziyad Salameh
	M/W courses include two additional classes on Friday: July 22 and August 5. T/Th classes include two additional classes on Friday: July 29 and August 12.						
<b>English</b>	42.101-021*	College Writing I	M/W	7:00-10:00 pm	3		Stephen Lucasi
	42.102-021*	College Writing II	M-Th	10:15 am-12:15 pm	3	P: 42.101	Mary Hojnacki
	42.102-022*	College Writing II	T/Th	7:00-10:00 pm	3	P: 42.101	Kim Komperda
	42.104-021*	College Writing II for International Students	M/W	7:00-10:00 pm	3	P: 42.103; English composition requirement	Rita Naughton
	42.212-021	The Short Story	M/W	7:00-10:00 pm	3	P: 42.102; LT	Dina Bozicas
	42.217-021	The Horror Story	T/Th	7:00-10:00 pm	3	P: 42.102; LT	Carl Mason
	42.224-021**	Business Writing	M/W	6:00-9:00 pm	3	P: 42.102	Peter Payack
	42.226-021**	Technical and Scientific Communication	T/Th	7:00-10:00 pm	3	P: 42.102	Peter Payack
	42.232-021	Turning Fiction Into Film	M-Th	10:15 am-12:15 pm	3	P: 42.102; LT	Madeline Sherlock
	42.295-021	History of American Literature II	M/W	7:00-10:00 pm	3	P: 42.102; LT	Henry Venuti
	*Students will not receive credit for both 42.101 and 42.103. **Students will not receive credit for both 42.224 and 42.226. CERTIFICATE IN TECHNICAL WRITING (See page 4 for required courses.)						
<b>Graphic Design and Digital Imaging</b>	See courses listed under Art and Information Technology. CERTIFICATE IN GRAPHIC DESIGN AND DIGITAL IMAGING (See page 4 for required courses.)						



# UNDERGRADUATE CREDIT COURSES

	No.	Title	Days	Time	Cr (Con)	P: Prerequisite C: Corequisite/Comments	Instructor
Health	30.305-021	Exercise Physiology Lecture	M-F	8:00-10:00 am	4	P: Anatomy and Physiology, Chemistry; not open to UMass Lowell Exercise Physiology majors; SL	Sean Collins
	30.306-021	Introduction to Gerontology	T/Th	4:00-7:00 pm	3		Judith Conahan
	30.307-021	Exercise Physiology Lab	M/W/Th	10:15am-12:15 pm	3		Sean Collins
	35.102-021	Human Anatomy and Physiology II	T/Th	6:15-9:15 pm	3	P: 35.101, 35.103 (or equiv.); C: 35.104; SL	Paul Fierimonte
	35.104-021	Human Anatomy & Physiology II Lab	T/W/Th	2:00-5:00 pm	1 (3)	P: 35.101, 35.103; C: 35.102; SL	Edward Kostek
	35.207-021	Fitness and Nutrition	T/Th	6:00-9:00 pm	3		Allison Sigler
	35.211-021	Basic Clinical Microbiology and Pathology	M-Th	5:00-7:00 pm	3	P: Anatomy and Physiology	Bryan Cowell
	35.213-021	Basic Clinical Microbiology and Pathology Lab	M-Th	7:00-9:00 pm	1 (3)	C: 35.211	Bryan Cowell
History	43.106-021	The Modern World	T/Th	6:00-9:00 pm	3	HS	Robert Lemire, Jr.
	43.112-021	U.S. History Since 1877	M/W	7:00-10:00 pm	3	HS	Diane Lewis
Information Technology (Including Multimedia and Graphics)	90.160-021	Introduction to Information Systems	T/Th	6:00-9:00 pm	3		Christopher Gambon
	90.202-021	Introduction to PCs & MS Office	T/Th	6:00-9:00 pm	3		Terry Bass
	90.211-021*	Intro. to Programming with C - Part I	M/W	7:00-10:00 pm	3	No previous prog. experience required; P: 90.211	Helen Wang
	90.212-021*	Intro. to Programming with C - Part II	T/Th	7:00-10:00 pm	3		Department Faculty
	90.220-021	Visual Basic®	T/Th	7:00-10:00 pm	3		Leo Javits
	90.247-021	Web Authoring: Flash MX (Windows)	M/W	6:30-9:30 pm	3	P: 90.291, 90.302 or prog. familiarity	Chris MacDonald
	90.267-021*	C Programming	T/Th	6:00-9:00 pm	3	P: Previous programming experience	Department Faculty
	90.268-021	C++ Programming	M/W	7:00-10:00 pm	3	P: 90.267 or 90.212	James Brzowski
	90.271-021	C# (C Sharp)	T/Th	7:00-10:00 pm	3	P: 90.268 or 90.301	James Brzowski
	90.291-021	Introduction to DHTML	M/W	6:30-9:30 pm	3		David Sciuto
	90.297-021	Introduction to Java	T/Th	6:00-9:00 pm	3	P: Previous prog. experience required	Peter Weston
	90.301-021	Java™ Programming/Windows	M/W	7:00-10:00 pm	3	P: 90.297 or 90.268	Spencer Marks
	90.303-021	Advanced Java™ Programming	M/W	6:00-9:00 pm	3	P: 90.301	Peter Weston
	90.312-021	UNIX® Shell Programming	M/W	7:00-10:00 pm	3	P: 90.311, and 90.267 or 90.212	Michael Richards
	90.313-021	UNIX Internals	M/W	7:00-10:00 pm	3	P: 90.312	Partha Mittra
	90.443-021	Fundamentals of Client/Server Computing	M/W	6:00-9:00 pm	3		Umesh Bhargava
	90.461-021	LAN/WAN Technologies	M/W	7:00-10:00 pm	3	P: 90.267 or previous prog. experience	Krishnajee Putcha
	90.462-021	TCP/IP and Network Architecture	M/W	6:00-9:00 pm	3	P: 90.461	Arvind Kukreja
	90.474-022	Relational Database Concepts	T/Th	6:00-9:00 pm	3	P: 90.267	Umesh Bhargava
	*Students will not receive credit for both 90.267 and the 90.211/90.212 sequence.						
	CERTIFICATE IN DATABASE MANAGEMENT TECHNOLOGIES (See page 3 for required courses.)						
	CERTIFICATE IN CONTEMPORARY COMMUNICATIONS						
	CERTIFICATE IN DATA/TELECOMMUNICATIONS (See page 3 for required courses.)						
	CERTIFICATE IN FUNDAMENTALS OF INFORMATION TECHNOLOGY (See page 3 for required courses.)						
	CERTIFICATE IN INTRANET DEVELOPMENT (See page 3 for required courses.)						
	CERTIFICATE IN MULTIMEDIA APPLICATIONS (See page 4 for required courses.)						
	CERTIFICATE IN UNIX (See page 3 for required courses.)						
	CERTIFICATE IN WEBSITE DESIGN AND DEVELOPMENT (See page 4 for required courses.)						
Languages	50.212-021	Intermediate Conversational French II	M/W	7:00-10:00 pm	3	P: 50.211 or equivalent	Joseph Garreau
	50.378-021	Images of Women in French Cinema	T/Th	7:00-10:00 pm	3	AHD; conducted in English	Joseph Garreau
	52.374-021	Classics of Italian Cinema	M-Th	10:15 am-12:15 pm	3	VCA; conducted in English	Mario Aste
	52.380-021	Italian Cinema: Directors and Themes	M-Th	8:00-10:00 am	3	VCA; conducted in English	Mario Aste
	54.102-021	Beginning Spanish II	M-Th	8:00-10:00 am	3	P: 54.101 or equivalent	J. Heli Hernandez
	54.102-022	Beginning Spanish II	M/W	7:00-10:00 pm	3	P: 54.101 or equivalent	Francisca Gonzalez-Arias
	54.212-021	Intermediate Conversational Spanish II	M-Th	10:15 am-12:15 pm	3	P: 54.211 or equivalent	J. Heli Hernandez
	54.212-022	Intermediate Conversational Spanish II	T/Th	7:00-10:00 pm	3	P: 54.211 or equivalent	Kimberly Vitchkoski
Legal Studies (See also Paralegal Studies)	41.365-021	The Legal Environment of Business	M/W	7:00-10:00 pm	3		Paul King
	41.370-021	Real Estate Law	M/W	7:00-10:00 pm	3		J. Alan Roberts
	41.376-021	Family Law	T/Th	7:00-10:00 pm	3		Ellen Curran
	41.381-021	Women and the Law	M/W	7:00-10:00 pm	3		Nancy Dick
	41.387-021	Legal Research Methods	T/Th	7:00-10:00 pm	3		Nancy Dick
	CERTIFICATE IN PARALEGAL STUDIES						
Mathematics	90.111-021*	Fundamentals of Algebra	M/W	7:00-10:00 pm	3		Eugene Welch, Jr.
	92.121-021**	Precalculus Mathematics	M-Th	8:00-10:00 am	3	P: 90.111 or equivalent; Placement Exam given the first week of class; MA	Alan Kaplan
	92.121-022**	Precalculus Mathematics	M/W	6:30-9:30 pm	3	P: 90.111 or equivalent; Placement Exam given the first week of class; MA	Candice Weston
	92.122-021	Management Calculus	M-Th	10:15 am-12:15 pm	3	P: 90.119 or 92.121 or equivalent; not for science or engineering majors; MA	Patricia Gifford
	92.123-021	Precalculus Mathematics II	T/Th	7:00-10:00 pm	3	P: 92.121; MA	Terence Watterson
	92.125-021	Calculus A	T/Th	7:00-10:00 pm	3	P: 92.123; MA	Alan Kaplan
	92.126-021	Calculus B	M/W	7:00-10:00 pm	3	P: 92.125; MA	Theresa Schille
	92.183-021	Introduction to Statistics	M-Th	8:00-10:00 am	3	P: 90.111 or equivalent; MA	Alexander Olsen
	92.183-022	Introduction to Statistics	M/W	7:00-10:00 pm	3	P: 90.111 or equivalent; MA	Alexander Olsen
	92.231-021	Calculus III	M-F	10:15 am-12:15 pm	4	P: 92.132; MA	Rida Mirie
	92.236-021	Engineering Differential Equations	T/Th	6:00-9:00 pm	3	P: 92.225 or 92.132	Rida Mirie
	92.321-021	Discrete Structures I	M/W	6:00-9:00 pm	3	P: 90.112 or 92.121	Anthony Penta
	92.386-021	Statistics for Science and Engineering	M/W	6:00-9:00 pm	3	P: 92.225 or 92.132	Department Faculty
	92.427-021	Geometry	M/W	2:00-5:30 pm	3	P: 92.221 or 92.321	Marvin Stick
	92.450-021	Mathematical Modeling	T/Th	6:00-9:00 pm	3	P: 92.234	James Graham-Eagle
	*Fundamentals of Algebra (90.111) is a preparatory course and cannot be credited toward a degree program at the University of Massachusetts Lowell.						
	**Students will not receive credit for both 90.112 and 92.121. For students in the Information Systems Program, 92.121 can be substituted for the combination of 90.112 and 90.119.						
	University of Massachusetts Lowell day students must have approval from their Department Chairperson before taking courses with a 90 prefix.						
	Many 500-level courses are well within the grasp of upper level undergraduates and may be used as electives. Contact the Graduate School for course listings and admissions procedures.						
Mechanical Engineering	22.212-021	Strength of Materials	M-Th	8:00-10:00 am	3	P: 22.211	Faize Jamil
	22.213-021	Dynamics (alternate 14.205)	M/W	7:00-10:00 pm	3	P: 22.211, 92.231	Faize Jamil
Multimedia Applications	(See courses listed under Information Technology.) CERTIFICATE IN MULTIMEDIA APPLICATIONS (See page 4 for required courses.)						
Music	71.110-021	Basic Music Theory	M-Th	8:00-10:00 am	3	For Non-Music Majors only; AE	Lisa Cleveland
	71.202-021	Music Theory 4	M-Th	10:15 am-12:15 pm	3	P: 71.201	Lisa Cleveland
	71.204-021	Aural Skills 4	M-Th	12:30-1:50 pm	1 (2)	P: 71.203	Department Faculty

Free software (See page 3 for details.)



# UNDERGRADUATE CREDIT COURSES

	No.	Title	Days	Time	Cr (Con)	P: Prerequisite C: Corequisite/Comments	Instructor
<b>Paralegal Studies</b> (See also Legal Studies)	41.370-021	Real Estate Law	M/W	7:00-10:00 pm	3		J. Alan Roberts
	41.387-021	Legal Research Methods	T/Th	7:00-10:00 pm	3		Nancy Dick
	CERTIFICATE IN PARALEGAL STUDIES						
<b>Philosophy</b>	45.201-021	Introduction to Philosophy	M/W	7:00-10:00 pm	3	VC, AHE	Edward Engelmann
	45.203-021	Introduction to Ethics	T/Th	7:00-10:00 pm	3	VC, AHDE	Joseph Shay
	CERTIFICATE IN CONTEMPORARY COMMUNICATIONS (See page 3 for required courses.)						
<b>Physics</b>	95.104-021	General Physics II	M-Th	8:00-10:00 am	3	P: 95.103; C: 96.104; SL	Edward Salesky
	95.141-021	Physics I	M-F	10:15 am-12:15 pm	3 (4)	C: 92.131; 96.141; SL	Edward Salesky
	95.144-021	Physics II	M-F	10:15 am-12:15 pm	3 (4)	P: 95.141; C: 92.132, 96.144; SL	Roger McLeod
	96.104-021	General Physics II Lab (2 days per week)	T/Th	1:00-4:00 pm	1 (2)	P: 96.103; C: 95.104 or 95.202; SL	Department Faculty
	96.141-021	Physics I Lab	M/W	1:00-4:00 pm	1 (2)	C: 95.141; SL	Department Faculty
	96.144-021	Physics II Lab (2 days per week)	T/Th	1:00-4:00 pm	1 (2)	P: 96.141; C: 95.144; SL	Department Faculty
	99.101-021	Radiation and Life	M/W	6:00-9:00 pm	3	C: 99.102; SL	Anthony Stevens
	99.102-021	Radiation and Life Lab	M/W	3:30-5:30 pm	1 (2)	P: or C: 99.101; SL	Anthony Stevens
<b>Plastics</b>	27.452-021	Selected Topics II	M/W	7:00-10:00 pm	3	P: Coordinator permission	Department Faculty
	27.454-021	Selected Topics IV	T/Th	7:00-10:00 pm	3	P: Coordinator permission	Department Faculty
NOTE: Courses with the 27 prefix are not eligible for graduate credit. CERTIFICATE IN PLASTICS ENGINEERING TECHNOLOGY							
<b>Political Science</b>	46.101-021	Introduction to American Politics	M-Th	10:15 am-12:15 pm	3	BS	George Anthes
	46.210-021	Introduction to Media and Politics	T/Th	7:00-10:00 pm	3		John Power
	46.316-021	Politics and Film	M-Th	10:15 am-12:15 pm	3		Jeffrey Gerson
	<b>NEW!</b> 46.350-011	Urban Politics	M-Th	12:30-2:30 pm	3		Jeffrey Gerson
<b>Psychology</b>	47.101-021	General Psychology	M/W	7:00-10:00 pm	3	BS	Department Faculty
	47.335-021	Psychology and Women	T/Th	6:00-9:00 pm	3	BSV	Department Faculty
<b>Sociology</b>	48.101-021	Introduction to Sociology	M-Th	8:00-10:00 am	3	BS	Levon Chorbajian
	48.111-021	Sociology Through Literature	M-Th	10:15 am-12:15 pm	3		William Lekas
	48.340-021	Sociology of Sports	T/Th	7:00-10:00 pm	3	P: 48.101	Levon Chorbajian
<b>Website Design and Development</b>	(See courses listed under Information Technology.) CERTIFICATE IN WEBSITE DESIGN AND DEVELOPMENT (See page 4 for required courses.)						
<b>Women's Studies</b>	41.381-021	Women and the Law	M/W	7:00-10:00 pm	3		Nancy Dick
	47.335-021	Psychology and Women	T/Th	6:00-9:00 pm	3	BSV	Cindy Jacobs
	50.378-021	Images of Women in French Cinema	T/Th	7:00-10:00 pm	3	AHD; conducted in English	Joseph Garreau



## SUMMER MUSIC PROFESSIONAL DEVELOPMENT WORKSHOPS

### COURSES OFFERED:

- ~ Orff Level I
- ~ Introduction to Technology Applications for the Music Classroom
- ~ Music as a Way of Knowing
- ~ Finale Workshop
- ~ World Percussion Ensemble
- ~ Instrumental Music Workshop
- ~ Video Technology
- ~ The Opera Connection

For more information visit our website at <http://continuinged.uml.edu>

## New Student Information System

Students will have self-service access on or about April 11, 2005.

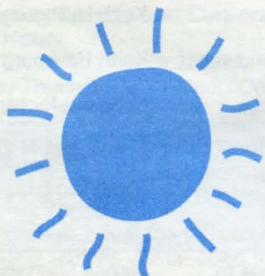
Students will be able to perform many transactions including:

- searching the course catalog and schedule of classes
- registering for classes as well as adding, dropping and swapping classes
- requesting official transcripts and designating the recipients of transcripts
- paying a bill
- accepting and declining financial aid

Students will also have access to view and print their:

- class schedules (called a Study List in self-service)
- grades
- unofficial transcripts
- advisor's name
- account summary (billing)
- financial aid information (for the 2006 aid year and beyond)

For more information, contact the ISIS training team at [uml\\_training@uml.edu](mailto:uml_training@uml.edu) or check out the **Just for Students** section at: <http://intranet.uml.edu/it/training/isis.htm>  
**Important:** Students may still register through mail, walk-in or fax. See registration information on page 17 and Registration form on page 20.



## Did you know

THAT YOU COULD TAKE UMASS LOWELL PROFESSIONAL SEMINARS,  
UNDERGRADUATE AND GRADUATE COURSES IN BEDFORD, MA?

It's never been more convenient to advance your professional education! The University of Massachusetts Lowell has a satellite center at the V.A. Medical Conference Center facility in Bedford, Mass. The University offers a broad array of courses in their state-of-the-art classrooms and labs.

### Satellite Center

### Summer 2005 Courses Held at Bedford, MA, V.A. Medical Conference Center

#### Undergraduate Credit

**90.267-041 C Programming**  
Meets Tuesdays and Thursdays 6-9pm

**90.483-041 Wireless Communications**  
Meets Tuesdays and Thursdays 6-9pm

#### Graduate Credit

**44.501-041 Foundations of Criminal Justice**  
Meets Mondays and Wednesdays 6-9pm

**44.543-041 Forensic Psychology**  
Meets Tuesdays and Thursdays 6-9pm

**44.680-041 Special Topics: Forensic Pathology**  
Meets Mondays and Wednesday 6-9pm

#### Non-Credit

**00.904-041 Basic Electronics**  
Meets Tuesdays and Thursdays 6-9 pm  
May 10, 12, 17, 19, 24, 26, 31, June 2  
\$450.00 (Students must purchase their own text book)

**00.905-041 Instrumentation and Measurement**  
Meets Wednesdays 6-9 pm  
May 11, 18, 25, June 1, 8, 15,  
\$350.00

**00.511-041 Introduction to Unified Modeling Language**  
Meets Mondays 6-9 pm  
May 16, 23;  
June 6, 13, 20, 27  
6.00-9.00 pm  
\$595.00

**00.702-041 Web Marketing**  
Meets Thursdays 6-8pm  
June 2-June 30  
\$495.00

For more information, contact :Jacqueline Hawk, 978-934-2141, [Jacqueline\\_Hawk@uml.edu](mailto:Jacqueline_Hawk@uml.edu)



GRADUATE COURSE LISTINGS

Graduate Courses  
Summer Session I

Except as noted: Day classes begin on May 23.  
M/W Evening Classes begin on May 23 and include 3 FRIDAYS: June 3 and June 17 and June 24 at the regularly scheduled hours.  
T/Th Evening Classes begin on May 24 and include 2 FRIDAYS: May 27 and June 10 at the regularly scheduled hours.

Reminder: It is important to check course numbers and prerequisites to ensure enrollment in the correct class.

	No.	Title	Days	Time	Cr (Con)	P: Prerequisite C: Corequisite/Comments	Instructor
Business Administration	60.501-031	Financial Accounting (5/23-7/15) (includes week of Fourth of July)	>Online Course		2	P: MBA Program and permission of Coordinator;*requires proctored exams	Charles Feeney
	60.730-011	Federal Taxation (5/23-6/30)	T/Th	6:00-10:00 pm	3	P: MBA Foundation Core and permission of Coordinator*	Charles Feeney
	61.601-011	Corporate Finance (5/23-6/25) (includes one additional class on Friday, June 10)	M/W	6:00-10:00 pm	3	P: MBA Foundation Core and permission of Coordinator*	Dev Prasad
	61.691-061	International Finance (5/23-7/15) (includes week of Fourth of July)	>Online Course		3	P: MBA Foundation Core and permission of Coordinator*	Yash Puri
	61.735-011	Portfolio Investment and Security Analysis (5/23-6/25)	T/Th	6:00-10:00 pm	3	MBA Foundation Core and permission of Coordinator*	Dev Prasad
	62.501-031	Marketing Fundamentals (5/23-7/15) (includes week of Fourth of July)	>Online Course		2	P: MBA Program and permission of Coordinator*	Duncan LaBay
	62.601-061	Analysis of Customers and Markets (5/23-7/15) (includes week of Fourth of July)	>Online Course		3	MBA Foundation Core and permission of Coordinator*	Eunsang Yoon
	63.501-031	Operations Fundamentals (5/23-7/15) (includes week of Fourth of July)	>Online Course		2	P: MBA Program and permission of Coordinator;* requires proctored exams	Riaz Khan
	63.601-061	Management Information Systems (5/23-7/15) (includes week of Fourth of July)	>Online Course		3	P: MBA Foundation Core and permission of Coordinator;* requires on-campus presentations and may require proctored exams	Luvai Motiwalla
	64.601-061	Operations Management (5/23-7/15) (includes week of Fourth of July)	>Online Course		3	P: MBA Foundation Core and permission of Coordinator*	David Lewis
	66.501-031	Organizational Behavior (5/23-7/15) (includes week of Fourth of July)	>Online Course		2	P: MBA Program and permission of Coordinator*	Stuart Freedman
	66.511-031	Global Enterprise and Competition (5/23-7/15) (includes week of Fourth of July)	>Online Course		2	P: MBA Program and permission of Coordinator*	Bernard Cookson
	66.688-011	Special Topics in Management: Advanced Negotiations (5/23-6/30)	M/W	6:00-10:00 pm	3	P: 66.725, MBA Foundation Core and permission of Coordinator*	Timm Kainen
	Courses are open to College of Management certificate students and students matriculated in the University of Massachusetts Lowell MBA Program. Courses also are available to non-UML students who are currently enrolled in other AACSB-accredited Master's programs, and who have the required prerequisites. *Requires permission of the Coordinator of Graduate Management Programs, Kathleen Rourke, 978-934-2848.						
Computer Science	91.516-021*	Operating Systems II (5/23-8/24)	Thurs	6:00-9:00 pm	3		Department Faculty
*Requires permission of Graduate Computer Science Coordinator							
Criminal Justice	44.501-041	Foundations of Criminal Justice Scholarship (Held at Veterans Administration Medical Center, Bedford, MA)	M/W	6:00-9:00 pm	3		Ronald Corbett
	44.503-061	Administration of Criminal Justice (5/23-7/29)	>Online Course		3		Larry Siegel
	44.521-061	Criminological Theory (5/23-7/29)	>Online Course		3		Larry Siegel
	44.526-061	Hate Crimes and Terrorism (5/23-7/29)	>Online Course		3		Allan Roscoe
	44.543-061	Forensic Psychology (5/23-7/29)	>Online Course		3		Alexandria Weida
	44.543-041	Forensic Psychology (Held at Veterans Administration Medical Center, Bedford, MA)	T/Th	6:00-9:00 pm	3		Ellsworth Fersch
	44.545-061	Criminal Mind and Behavior (5/23-7/29)	>Online Course		3		Alexandria Weida
Education	44.680-041	Special Topics: Forensic Pathology (Held at Veterans Administration Medical Center, Bedford, MA)	M/W	6:00-9:00 pm	3		Dennis Cullinane
	01.625-061	Organization of Schools and School Systems (5/23-7/29)	>Online Course		3		William Phelan
	01.630-061	Diversity Issues for School Leaders (5/23-7/29)	>Online Course		3		Hector Torres
	05.590-031	Practicum I: Supervisors/Directors K-12 (5/23-8/19)	>Online Course		1	P: Permission of instructor	Charles Christensen
	05.591-031	Practicum II: Supervisor/Directors (5/23-8/19)	>Online Course		2	P: Permission of instructor	Charles Christensen
	05.592-031	Practicum I: Elementary Schools Principals P-6 (5/23-8/19)	>Online Course		1	P: Permission of instructor	Charles Christensen
	05.593-031	Practicum II: Elementary Schools Principals P-6 (5/23-8/19)	>Online Course		2	P: Permission of instructor	Charles Christensen
	05.594-031	Practicum I: Middle School Principals 5-8 (5/23-8/19)	>Online Course		1	P: Permission of instructor	Charles Christensen
	05.595-031	Practicum II: Middle School Principals 5-8 (5/23-8/19)	>Online Course		2	P: Permission of instructor	Charles Christensen
	05.596-031	Practicum I: High School Principals 9-12 (5/23-8/19)	>Online Course		1	P: Permission of instructor	Charles Christensen
	05.597-031	Practicum II: High School Principals 9-12 (5/23-8/19)	>Online Course		2	P: Permission of instructor	Charles Christensen
	05.642-061	Principles of Supervision (5/23-7/29)	>Online Course		3		Robert Gower
	05.643-061	The Principalship (5/23-7/29)	>Online Course		3		Charles Christensen
	06.522-061	Young Adult Literature (5/23-7/29)	>Online Course		3		Maura Ammendolia
	06.531-061	Organization and Supervision of Reading and Language (5/23-7/29)	>Online Course		3		William Harp
Electrical and Computer Engineering	07.642-061	Program Evaluation (5/23-7/29)	>Online Course		3		B. Jochums-Slez
	16.521-011	Real Time D.S.P.	M/W	2:00-5:00 pm	3	P: 16.362	Mufeed Mah'd
	16.528-011	Alternate Energy Sources	M/W	6:00-9:00 pm	3	P: Instructor permission	Ziyad Salameh
	16.529-011	Electric Vehicle Technology	T/Th	6:00-9:00 pm	3	P: Instructor permission	Ziyad Salameh
	16.577-011	Verification of Very Large Digital Designs	T/Th	6:00-9:00 pm	3	P: 16.574	James Moran
	16.593-011	Industrial Experience	TBA	TBA	0		Ziyad Salameh
	16.666-021*	Storage Area Networks (5/23-7/29)	M/W	6:00-8:00 pm	3	P: 16.583	Oliver Ibe
NEW!	16.710-011	Selected Topics: Radio Wave Propagation	M/W	6:00-9:00 pm	3	P: 16.461	Artem Saakian
	Except for asterisked course, M/W courses include three additional classes on Friday: June 3, June 17, and June 24. Except for asterisked course, T/Th courses include two additional classes on Friday: May 27 and June 10. *16.666-021 Storage Area Networks includes two additional classes on Friday: July 1 and July 15.						
Health	34.650-021	Clinical Education Experience I (5/30-7/22)	M-F	8:00 am-4:00 pm	3 (4)	P: First-year Physical Therapy Graduate students only	Keith Hallbourg
	34.652-021	Clinical Education Experience II (6/27-8/19)	M-F	8:00 am-4:00 pm	3 (4)	P: Clinical Education Experience I, second-year Physical Therapy graduate students only	Keith Hallbourg
	36.613-031	Infectious Disease (5/23-8/19)	>Online Course		3	P: One semester of General Microbiology	S. Fessia-Richardson
Mathematics	92.500-031	Discrete Structures	>Online Course		3		Alan Doerr
	92.535-011	History of Mathematics	T/Th	6:00-9:00 pm	3	P: Calculus	Joyce Williams
	92.576-011	Statistical Programming Using SAS	T/Th	6:00-9:00 pm	3	P: 92.385 or equivalent	Paula Wolk
	NEW! 92.578-021	Statistical Inference for Data Mining (5/23-8/19)	Fri	5:00-8:00 pm	3	P: 92.386 or equivalent	Lee Jones
Mechanical Engineering	22.512-031	Applied Finite Elements (5/23-8/19)	>Online Course		3	P: Requires instructor permission; access to a PC; \$150 course fee for software; optional on-campus course orientation: May 23, 6:00 pm	James Sherwood
Music	73.510-021	Foundations of Music Education (5/23-8/19)	Tues	5:00-8:00 pm	3		Donna Nagle
For additional Summer Music Graduate Education courses, please see Summer Session II.							
Physical Therapy Transitional Doctorate	34.701-011	Noncredit Portfolio Assessment for Transitional Doctorate in Physical Therapy (tDPT)	Non-credit course		0		Department Faculty
	34.702-031	Clinical Reasoning in Physical Therapy (5/23-8/19)	>Online Course		3	P: Admittance into tDPT; req. MS Word	Constance Seymour
Psychology	47.533-011	Mental Health Problems in the Community	T/Th	6:00-9:00 pm	3	P: Open to senior students with instructor permission	Peter Hantzis
	47.536-061	Forensic Psychology (5/23-7/29)	>Online Course				Alexandria Weida
Regional Economic and Social Development	57.512-011	Community Conflict Resolution	T/Th	6:00-9:00 pm	3		David Turcotte
Work Environment	19.559-011	Conflict Resolution	T/Th	6:00-9:00 pm	3		David Turcotte



# Graduate Courses Summer Session II

Except as noted: Day classes begin on July 11.

M/W Evening Classes begin on July 11 and include 2 FRIDAYS: July 22 and August 5 at the regularly scheduled hours.  
T/Th Evening Classes begin on July 12 and include 2 FRIDAYS: July 29 and August 12 at the regularly scheduled hours.

Reminder: It is important to check course numbers and prerequisites to ensure enrollment in the correct class.

	No.	Title	Days	Time	Cr (Con)	P: Prerequisite C: Corequisite/Comments	Instructor
Business Administration	61.688-021	Special Topics: Financial Markets and Monetary Policy	T/Th	6:00-9:00 pm	3	MBA Foundation Core and permission of Coordinator*	Michael Carter
	62.601-062	Analysis of Customers and Markets (7/11-8/23)	Online Course		3	MBA Foundation Core and permission of Coordinator*	Eunsang Yoon
	66.691-021	Strategy	M/W	6:00-9:00 pm	3	MBA Foundation Core and permission of Coordinator*	Ashwin Mehta
Courses are open to College of Management certificate students and students matriculated in the University of Massachusetts Lowell MBA Program. Courses also are available to non-UML students who are currently enrolled in other AACSB-accredited Master's programs, and who have the required prerequisites. *Requires permission of the Coordinator of Graduate Management Programs, Kathleen Rourke, 978-934-2848.							
Electrical and Computer Engineering	NEW 16.510-021	Digital Signal Processing	T/Th	6:00-9:00 pm	3	P: 16.362, 16.363 preferred	Mufeed Mah'd
	16.593-021	Industrial Experience	TBA	TBA	0		Ziyad Salameh
	16.607-021	Electromagnetics of Complex Media	T/Th	6:00-9:00 pm	3	P: 16.507 or equivalent	Dikshitulu Kalluri
Mathematics	92.527-021	Geometry	M/W	2:00-5:30 pm	3	Course is generally applicable only to the Teacher Option	Marvin Stick
	92.550-021	Mathematical Modeling	T/Th	6:00-9:00 pm	3		J. Graham-Eagle
Music	73.573-021	Orff Level I (7/5-7/8) and and (7/11-7/15)	T-F	9:00 am-4:30 pm	3		R. Debrot/D. Nagle
	73.576-021	Finale Workshop (8/3-8/5)	M-F				
	73.577-021	Instrumental Music Workshop (8/8-8/10)	W/Th/F	9:00 am-4:00 pm	2		Dan Lutz
	73.578-021	Music As A Way of Knowing (8/1-8/5)	W/Th/F	9:00 am-4:00 pm	2		Debra-Nicole Huber
	73.579-021	World Percussion Ensemble (8/8-8/12)	M-F	9:00 am-4:00 pm	3		Nick Page
	73.581-021	The Opera Connection (8/17-8/19)	M-F	9:00 am-4:00 pm	3		Dan Foote
	73.582-021	Making Music Videos: An Engaging Assessment Tool (8/15-8/17)	W/Th/F	9:00 am-4:00 pm	2		Mark Caruso
	73.582-021	Making Music Videos: An Engaging Assessment Tool (8/15-8/17)	M/T/W	9:00 am-4:00 pm	2		Gena Greher
	73.583-021	Introduction to Technology Applications for the Music Classroom (7/25-7/29)	M-F	9:00 am-4:00 pm	3		Wayne Splettstoesser
Physical Therapy Transitional Doctorate	34.701-021	Noncredit Portfolio Assessment for Transitional Doctorate in Physical Therapy (tDPT)	Non-credit course		0		Department Faculty

Students interested in applying into Graduate degree or certificate programs should contact the Graduate School at 800-656-GRAD or [www.uml.edu/grad](http://www.uml.edu/grad). In some cases, a student may take only 6 credits prior to matriculating into a formal graduate degree program. Students with Bachelor's degrees from accredited institutions are eligible to enroll as non-degree students for a total of 12 credits prior to matriculating into formal Graduate degree programs. Generally, students must formally apply to graduate certificate programs before enrolling in graduate courses intended for specific certificate programs.

## GENERAL INFORMATION

### General Information

Consolidation of UML Enrollment Services across the Undergraduate, Continuing Studies and Graduate Programs occurred in the Fall 2004 term. Students can now register for Undergraduate, Continuing Studies and Graduate courses in Dugan Hall, First Floor, 883 Broadway Street, Lowell, MA, 01854-5104. Continuing Studies students may choose to register by mail, phone, fax, in person or by using the new ISIS (Inter-campus Student Information System) Web-based Self-Service system.

**Office Hours:**  
Monday-Thursday: 8:30 am-8:00 pm  
Friday: 8:30 am-5:00 pm

Continuing Studies and Corporate Education (Paley Room, Southwick 202) on North, the Centers for Learning (Southwick 308) on North, O'Leary Library (Third Floor) on South, and Fox Hall (Sixth Floor) on East are all now considered satellite sites and support the main operation on South.

#### Continuing Studies and Corporate Education Office Hours

Paley Room, Southwick 202, UML North  
Monday-Thursday: 8:30 am-8:00 pm  
Friday: 8:30 am-5:00 pm

#### Holiday Hours and Special Hours

May 30: Memorial Day (University closed)  
July 4: Independence Day (University Closed)

July 5 through July 8 the Office of Enrollment Services/Continuing Studies will be open from 8:30 am-5:00 pm.

The week of August 22 through August 26, the Office of Enrollment Services/Continuing Studies will be open from 8:30 am-7:00 pm.

Commencement: June 5, 2005

#### Phone Directory

Bookstore — UML North.....(978) 934-2623  
Bookstore — UML South.....(978) 934-6908  
Continuing Studies  
Main Number.....(978) 934-2480  
Fax Number.....(978) 934-3087  
Student & Faculty Support Center.....(978) 934-2474  
Enrollment Services.....(978) 934-2480  
Graduate School.....(978) 934-2380  
(978) 656-GRAD  
College of Education.....(978) 934-4600  
Library — UML North  
(Alumni/Lydon).....(978) 934-3205  
Library — UML South  
(O'Leary).....(978) 934-4550  
Phone-In Registration —  
Operator-Assisted.....(978) 934-2700  
UMass Lowell Main Number.....(978) 934-4000  
UMass Lowell Directions.....(978) 934-5800  
or [www.uml.edu/maps](http://www.uml.edu/maps)  
Weather Cancellations.....(978) 934-2121

See our Website at <http://continuinged.uml.edu>

You can also visit the Graduate School Website at [www.uml.edu/grad/off\\_campus](http://www.uml.edu/grad/off_campus)

### Registration Information

See Academic Calendars on page 18 for appropriate registration deadlines.

Students can register for classes in a variety of formats: mail-in, fax, walk-in, by phone, and by our new ISIS Web-based Self-Service system.

#### ISIS (Inter-campus Student Information System) Web-based self-service system

Returning students (i.e. students who have been enrolled in a course at any time during the last three semesters) can register and pay for courses online. Returning students will have a User ID generated for them. To look up your ID, go to <http://isis.uml.edu> and click User ID Lookup. Once you have obtained your User ID, follow these easy steps to register for classes.

1. From any PC with an internet connection, go to <http://isis.uml.edu>
2. Click [Student Self-Service Login](#).
3. Enter your User ID and password into the appropriate fields and click Submit.
4. Click [Academics](#).
5. Click [Enroll in a Class](#).
6. Select the **Term**.
7. Click [Add Classes](#).
8. Type the **Class Number** in the **Class Nbr** field or search for classes by clicking the magnifying glass.
9. Repeat Step 8 until all desired classes have been added.
10. Click the [Submit](#) button.

New students should use the mail, fax, phone-in and walk in options.

#### Mail-In Registration:

1. Fill out the registration form and return it postmarked no later than the scheduled deadline.
2. Mail to: University of Massachusetts Lowell  
Enrollment Services/Continuing Studies and  
Corporate Education  
883 Broadway Street, Dugan 102  
Lowell, MA 01854-5104
3. Payment must be made with the registration form, either by check, money order, VISA, MasterCard, or Discover. Make checks payable to: University of Massachusetts Lowell.
4. For classroom location and other scheduling information, please visit our new Inter-campus Student Information System.

### REGISTER EARLY

**Get a head start and register early!** Although we cannot guarantee an opening in any class, your chances for being enrolled in the course of your choice are better when you register early. Please note that seats in laboratory courses are limited.

#### Fax-In Registration:

Fill out the registration form and fax it to (978) 934-3087 no later than the scheduled deadline. Be sure to include your VISA, MasterCard, or Discover number.

#### Phone-In Registration with an Operator:

1. Payment can be made by VISA, MasterCard, or Discover only.
2. Call (978) 934-2700. Please refer to Enrollment Services/Continuing Studies hours for phone-in registration times. The registration staff may take only registration information. If you have any questions concerning courses and academic programs, please call (978) 934-2480 or (978) 934-2474 or see our website at <http://continuinged.uml.edu>.

#### PLEASE NOTE!

**Walk-In Registration is held at Enrollment Services/Continuing Studies and Corporate Education, 883 Broadway Street, Dugan Hall 102, UML South, Lowell, MA 01854-5104**

Please refer to the Office of Enrollment Services/Continuing Studies for walk-in registration hours. Payment must be made at the time of registration. Payment after 4:00 pm must be made by check, money order, VISA, MasterCard, or Discover.

#### New Student Information System

The campus will be rolling out access to the new Student Information System on a staggered basis. It is anticipated that students will have self-service access on or about April 11, 2005. Through self-service, all student populations (undergraduate, graduate and continuing studies) will be able to perform many transactions including:

- searching the course catalog and schedule of classes
- registering for classes as well as adding, dropping and swapping classes
- requesting official transcripts and designating the recipients of transcripts
- paying a bill
- accepting and declining financial aid

Students will also have access to view and print their:

- class schedules (called a Study List in self-service)
- grades
- unofficial transcripts
- advisor's name
- account summary (billing)
- financial aid information (for the 2006 aid year and beyond)

For more information, contact the ISIS training team at [uml\\_training@uml.edu](mailto:uml_training@uml.edu) or check out the **Just for Students** section at: <http://intranet.uml.edu/it/training/isis.htm>



REGISTRATION INFORMATION

General Registration and Open House: Thursday, May 12, 5:00-7:30 pm.

We will be holding an Open House on May 12 from 5:00-7:30 pm at UML South. Program Coordinators and Advisors will be present to answer your questions. Registration will be available. For further information, please call Continuing Studies at (978) 934-2474.

Late Registration — See box below for late registration dates.

Note: There is an additional non-refundable \$50.00 fee for late registration. This fee will be added automatically to any account that has not been paid. No exceptions.

Final Drop/Add Period

See the academic calendar for appropriate drop/add dates. Drop/Add can be processed in Enrollment Services/ Continuing Studies and Corporate Education, Dugan Hall 102, 883 Broadway Street, Lowell.

Withdrawal with "W" Notation

See the appropriate academic calendar for the last day to withdraw. Students withdrawing from any class must officially notify Enrollment Services/Continuing Studies and Corporate Education, UML South, Dugan Hall 102, 883 Broadway Street, Lowell in writing, in person, by fax (978) 934-3087 or by mail, postmarked no later than the scheduled deadline. Verbal messages to faculty or staff do not constitute official notification.

Email

A significant number of communications concerning the new Student Administration System will be delivered to students via email. For example, students will rely on email to receive information about the availability of class schedules, grade reports and financial awards that they can access using the ISIS web-based self-service.

To address this change in practice, UMass Lowell has implemented a new, robust email system and assigned UML email addresses to all students, including those enrolled in continuing studies classes. In addition, a new policy was recently approved that supports email as an official means of communication and assigns responsibility to students for maintaining their UML email account.

Effective immediately, students should be using their UML accounts with the @student.uml.edu suffix to ensure they receive timely communications from the University. Please see <http://email.uml.edu> and check the student email link.

Identification Card

Non-matriculated students who register by phone or mail will receive their ID by return mail with their pin letter. Students matriculated in a degree or certificate programs have been/or will be issued access cards.

Institutional Disclosure

Institutional Disclosure of Information according to the Higher Education Act is available at [www.uml.edu/student-services](http://www.uml.edu/student-services).

Students with Disabilities

A student with a disability who needs special arrangements should contact Johanna Riley at (978) 934-2539 early in the registration process. Special advising, registration assistance, preferential scheduling, and alternative examination procedures are available. Special parking is also available on a temporary basis.

The University's Annual Campus Crime and Safety Report

The University's Annual Campus Crime and Safety Report, which includes campus crime statistics and information about campus alcohol, drug and sexual assault policies as well as other important matters, is available on the Web at <http://www.uml.edu/student-services/dean/CampusCrimeReport.html>. Paper copies of this report are available upon request at University Police (Ball Hall — (978) 934-2384) and at the Office of Student Services (Cumnock Hall — 978-934-2100).

Correct Social Security Number/Tax Identification Number

The University of Massachusetts Lowell must obtain your correct social security number (SSN) to file certain information returns with the IRS as well as to furnish a statement to you. The returns the University must file contain information about qualified tuition and related expenses (Form 1098-T, Tuition Payments Statement). The information about your tuition will help to determine whether you, or the person who can claim you as a dependent, may take the Hope credit or Lifetime Learning credit to reduce the federal income tax.

Bookstore Locations

UML North — Falmouth First Floor, (978) 934-2623  
UML South — UML South Dining Hall, (978) 934-6908  
Please call the Bookstore to confirm the location of your textbook.

Financial Information

Tuition is priced on the listed credit hour unless the contact hour is different. Tuition is then based on the listed contact hour. See information on Financial Aid, TERI Loans, and Scholarships on our website at <http://continuinged.uml.edu>.

Tuition and Fee Information	Per Credit/Contact Hr.
Undergraduate Tuition	\$250.00
Undergraduate Audit	\$250.00
Undergraduate Off-Campus Courses/Audit*	\$250.00 to \$295.00
Undergraduate Online Courses	\$275.00
Undergraduate Online Courses Audit	\$275.00
Graduate Online Professional Courses and Audit	\$410.00
Graduate On-Campus and Off-Campus Courses and Audit*	\$410.00
Registration Fee per course (non-refundable)	\$30.00
Late Registration Fee (non-refundable)	\$50.00

\*Note: Some tuitions may vary depending on customization and customer and program requirements.

Students who have checks returned due to insufficient funds will be charged an additional \$30.00 for the processing of the registration.

Overdue Accounts

Students will be permitted to attend class and to utilize facilities only after they have cleared all their financial obligations to the University. In addition, student transcripts and diplomas will not be released until all debts have been paid. Should it be necessary to utilize the services of a collection agency or attorney for an overdue student account, the student will be liable for any and all legal fees, commissions, and associated service charges.

Directed Studies

Directed Studies and Practicums are considered Special Programs and, as such, tuition remission and certificates of eligibility cannot be accepted.

NOTE:

Veterans' Information

Veterans must be matriculated in an undergraduate degree program and have all appropriate paperwork on file in Enrollment Services/ Continuing Studies, UML South, Dugan Hall 102, 883 Broadway Street, Lowell, including a DD214, an Admission Application form, and official transcripts from other colleges in order to receive VA benefits. Tuition waivers are available to veterans who are legal residents of Massachusetts for more than 12 consecutive months, and Proof of Residency must be updated annually. These waivers for legal Massachusetts residents are not retroactive and do not cover registration and other fees.

Veterans requesting benefits must check the appropriate line on the registration form. Veterans should use the mail-in or walk-in options when registering and should provide all necessary documentation (no phone-in). For additional information, please see our Website at <http://continuinged.uml.edu> or call Linda Morabito at (978) 934-2461.

Veterans' waivers are available for on-campus courses provided there is a sufficient number of tuition-paying students enrolled to bear the cost of instruction and provided there is space available. Due to the high cost of online and off-campus courses, there are no waivers available for these courses. There are no waivers for Directed Studies, Practicums, and Internships. Merit and Need-Based Assistance Grants for online courses may be available to veterans who are presently enrolled in degree and certificate programs and who are making satisfactory academic progress towards their degrees or certificates.

International Students

International students registering for classes or enrolling in programs must provide proof of Visa status, and an F-1 I-20 or J-1 DS-2019 Form. Students with F-1 or J-1 status living in the United States will be allowed to count, per semester, only one distance learning (online) course, or 3 credits, toward the full-time undergraduate course load (12 hours) or the full-time graduate course load (9 hours). The ultimate responsibility to know and follow the USCIS rules rests upon the students themselves. Students on B-1, B-2, or F-2 visas may not register for any academic classes. Please call (978) 934-2588 if you have any questions. The University of Massachusetts Lowell does not issue I-20 Forms for any Continuing Studies Programs.

Academic Calendar & Registration Information



Continuing Studies offers students a variety of scheduling options to meet their needs. Online Classes meet from May 23 through August 19, 2005. Accelerated online classes: most accelerated classes meet from May 23 through July 29. A number of courses meet one day a week spanning May 23 through August 19, 2005. Please see the course schedule for courses that do not meet the calendar guidelines stated in this section.

May 23–June 30 Summer Session I

Day classes begin on Monday, May 23.  
M/W Evening classes begin on Monday, May 23 and include 3 FRIDAYS: June 3 and June 17, and June 24 at the regularly scheduled hours.  
T/Th Evening classes begin on Tuesday, May 24 and include 2 FRIDAYS: May 27 and June 10 at the regularly scheduled hours.  
Online classes begin Monday, May 23.  
We encourage you to mail-in, phone-in, or fax your registration.  
May 30: Memorial Day observed  
Mail-In Registration: April 4 to May 13  
Phone-In Registration: April 4 to May 13  
Fax-In Registration: April 4 to May 13  
Walk-In Registration: April 4 to May 13  
ISIS Web Self-Service: April 11

General Registration and Open House: Thursday, May 12  
Late Registration: Monday, May 16.  
There is an additional \$50.00 non-refundable fee for all classes added beginning the week of May 23. This fee will be added automatically to any account that has not been paid.

Last Day to Add a Lab  
Day Classes: May 24  
Last Day to Add Course  
Day Classes: May 24 without permission;  
May 25 with instructor permission  
M/W Evening Classes: May 25 without permission;  
June 1 with instructor permission  
T/Th Evening Classes: May 26 without permission;  
May 27 with instructor permission  
Online Classes: Through June 1

Last Day to Drop Course  
Day Classes: May 25  
M/W Evening Classes: June 1  
T/Th Evening Classes: May 27  
Online Classes: Through June 1

Last Day to Withdraw with "W" Notation  
Day Classes: June 16 for 3-credit courses,  
June 17 for 4-credit courses  
M/W Evening Classes: June 20  
(Before the 10th class meeting)  
T/Th Evening Classes: June 16  
(Before the 10th class meeting)  
Online Classes: July 29 for courses ending August 19  
Accelerated Online Classes: July 8 for courses ending July 15 and July 29

Final Examinations  
Day Classes: June 29 for 3-credit courses,  
June 30 for 4-credit courses  
M/W Evening Classes: Wednesday, June 29  
T/Th Evening Classes: Thursday, June 30

NOTE: M/W evening courses meet twice a week plus 3 Fridays: June 3, June 17, and June 24. T/Th evening courses meet twice a week plus 2 Fridays: May 27 and June 10.

July 11–August 19 Summer Session II

Day Classes begin on Monday, July 11.  
M/W Evening classes begin on Monday, July 11 and include 2 FRIDAYS: July 22 and August 5 at the regularly scheduled hours.  
T/Th Evening classes begin on Tuesday, July 12 and include 2 FRIDAYS: July 29 and August 12 at the regularly scheduled hours.  
Monday, July 4: Independence Day  
Mail-In Registration: April 4 to June 30  
Phone-In Registration: April 4 to June 30  
Fax-In Registration: April 4 to June 30  
Walk-In Registration: April 4 to June 30  
ISIS Web Self-Service: April 11

Late Registration: Begins Friday, July 1, 2005  
There is an additional non-refundable \$50.00 fee for late registration. This fee will be added automatically to any account that has not been paid.

Last Day to Add a Lab  
Day Classes: July 12  
Last Day to Add Course  
Day Classes: July 12 without permission;  
July 13 with instructor permission  
M/W Evening Classes: July 13 without permission;  
July 18 with instructor permission  
T/Th Evening Classes: July 14 without permission;  
July 19 with instructor permission

Last Day to Drop Course  
Day Classes: July 13  
M/W Evening Classes: July 18  
T/Th Evening Classes: July 19

Last Day to Withdraw with "W" Notation  
Day Classes: August 4 for 3-credit courses,  
August 5 for 4-credit courses  
M/W Evening Classes: August 5  
(Before the 10th class meeting)  
T/Th Evening Classes: August 9  
(Before the 10th class meeting)  
Online Classes: July 29 for courses ending August 19  
Accelerated Online Classes: July 8 for courses ending July 15 and July 29

Final Examinations  
Day Classes: August 17 for 3-credit courses,  
August 18 for 4-credit courses  
M/W Evening Classes: Wednesday, August 17  
T/Th Evening Classes: Thursday, August 18

NOTE: M/W evening courses meet twice a week plus 2 Fridays: July 22 and August 5. T/Th evening courses meet twice a week plus 2 Fridays: July 29 and August 12.



**Third-Party Payment**

All students using company direct payment, military plans, state tuition waivers, or veterans' waivers must include the appropriate forms or authorizing letters with their registration, or have them on file. No tuition refund is awarded for late submission of eligibility form. Students receiving company reimbursement must prepay their own tuition. For additional information, call (978) 934-2446.

**NOTE:****Senior Citizens**

Senior citizens (60 years or older) who are Massachusetts residents may attend classes in Continuing Studies credit programs tuition-free provided that there is a sufficient number of tuition-paying students enrolled to bear the cost of instruction and provided there is space available. **Please note that waivers are not retroactive and do not cover registration and other fees.** Proof of Massachusetts residency and birth date must be provided annually at the time of registration. There are no waivers available for online and off-campus courses. Merit and Assistance Grants are available for veterans and seniors taking online courses who are presently enrolled in Degree and Certificate Programs and are making satisfactory academic progress towards their degrees or certificates.

**Tuition Refund Policy for Credit Courses**

Any eligibility for tuition refund is based on the academic calendar, not class attendance, and is pro-rated as follows, excluding fees:

**Tuition Refund Policy for Courses Spanning Summer I and II Including Online Courses**

Before class begins	100%
Drop from 1st - 7th calendar day	80%
Drop from 8th - 14th calendar day	50%
After 14th calendar day	No refund

**Tuition Refund for Summer I or Summer II Courses and Accelerated Online Courses**

Before class begins	100%
Drop from 1st to 5th calendar day	80%
Drop from 6th to 10th calendar day	50%
After 10th calendar day	No refund

Tuition will be refunded if Continuing Studies is responsible for cancellations. The refund process normally requires at least a period of four to six weeks from the beginning of the semester.

Students withdrawing from any class must officially notify the Office of Enrollment Services in writing, in person, by fax (978) 934-3087 or by mail, postmarked no later than the scheduled deadline. Verbal messages to faculty or staff do not constitute official notification.

**Tuition Refund Policy for Students Receiving Title IV Financial Aid and Who Are Enrolled in a Degree or Specifically Designated Certificate Program**

Refunds for Title IV financial aid recipients will be processed according to Federal guidelines and institutional policy. Please call the Financial Aid Office at (978) 934-4220 if you have any questions.

**Student Health Insurance**

Every student who is enrolled in at least 9 semester hours or more in a degree program is required by Massachusetts state legislation to participate in a qualifying student health insurance program. The cost of this insurance is \$503 from January 1 until August 14 and \$210 from May 20 until August 14. Payment of the appropriate fee will be required at registration. To waive participation in this program, students must fill out a form at registration showing equivalent coverage. The name of your insurance company and your policy number are required information on the waiver form. Please call Frances Flynn at (978) 934-2491.

**Student Health Insurance for International Students**

All International students are required to be enrolled in the University Student Health Insurance Plan. This requirement is authorized under the insurance laws for higher education students in Massachusetts (Section 275 of Chapter 151 of the Acts of 1996). The only exception to this requirement will be for International students covered through an embassy plan. Students so insured will be permitted to waive the school plan, providing they submit official documentation that confirms they have such coverage and that this coverage meets the state requirements. Documentation of student status must be provided. Please call Frances Flynn at (978) 934-2491.

**Financial Aid**

For information regarding Financial Aid, please contact Thu-Ha Pham in the Financial Aid Office at (978) 934-4222. See information on Financial Aid, TERI Loans and Scholarships on our website at <http://continuinged.uml.edu>.



# Information

The University of Massachusetts Lowell is accredited by the New England Association of Schools and Colleges, which accredits schools and colleges in the six New England states. Membership in the Association indicates that the institution has been evaluated carefully and meets the standards agreed upon by qualified educators. The programs in Civil Engineering Technology, Electronic Engineering Technology, and Mechanical Engineering Technology are accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology. The Bachelor of Science in Business Administration (BSBA) is accredited by the AACSB — The International Association for Management Education.

**Catalog**

Students should refer to the Continuing Studies and Corporate Education catalog for rules, regulations, program

outlines, and course descriptions. The catalog is available online at <http://continuinged.uml.edu>.

**Admission into an Undergraduate Certificate or Degree Program**

Students who have graduated from high school or who have earned a high school equivalency certificate are invited to apply for programs leading to a Certificate or an Associate's or Bachelor's degree. Applications for all programs are accepted on a rolling admissions basis. Please send applications to UML Admissions/Continuing Studies and Corporate Education, c/o Kathleen Shannon, Dugan Hall 110, 883 Broadway Street, Lowell, MA 01854-5104. For a listing of our degree and certificate programs, please see pages 8-17. A student enrolled in any of our degree or certificate programs should schedule an appointment with the appropriate program advisor to help plan a schedule for degree or certificate completion. Please call Continuing Studies at (978) 934-2474 to learn about our programs or see our website at [www.continuinged.uml.edu](http://www.continuinged.uml.edu).

**Admission into a Graduate Certificate or Degree Program**

Students interested in applying into Graduate degree or certificate programs should contact the Graduate School at (800) 656-GRAD or [www.uml.edu/grad](http://www.uml.edu/grad). Students with Bachelor's degrees from accredited institutions are eligible to enroll as non-degree students for a total of 12 credits prior to matriculating into formal Graduate degree programs. Students must formally apply to Graduate certificate programs before enrolling in Graduate courses intended for specific certificate programs.

**Undergraduate Degree Completion**

Students who expect to complete their degree requirements in the 2004-2005 academic year must arrange for a graduation interview. Please call Continuing Studies at (978) 934-2474. Students who anticipate graduating at the end of the Spring semester must complete the interview process by April 29, 2005. Students who anticipate graduating at the end of the Summer Sessions must complete the interview process by June 24, 2005. A fee of \$75.00 is required of graduating students. The University officially awards degrees to Fall graduates in February of the following semester and diplomas will be available for students in March. Commencement will be held on June 5, 2005.

**Undergraduate Certificate Completion**

When a student completes the necessary courses for a certificate program, the student should complete and submit a Certificate Award Petition to Continuing Studies/Advising Center.

**Course Grades**

Grades for the summer sessions will be available via Student Self-Service.



# Information

Students are welcome to drop by Continuing Studies, located in the Paley Room, Southwick Hall 202, UML North, or Enrollment Services/CSCE, Dugan Hall, Room 102, UML South from 8:30 am to 8pm Monday-Thursday and 8:30 am to 5:00 pm Friday to obtain general information on Associate's and Bachelor's degrees and certificate programs, and/or to obtain catalogs and brochures. Call (978) 934-2474 for information or to schedule an appointment or email at [Continuing\\_Education@uml.edu](mailto:Continuing_Education@uml.edu). For questions on Graduate programs, call the Graduate School at (978) 934-2380 or (800) 656-GRAD or see the website at [www.uml.edu/grad](http://www.uml.edu/grad).

**Appointments with Program Coordinators and General Advisors**

Students may schedule appointments with General Advisors and Faculty Program Coordinators as well as with Evening Supervisors, who are available to answer questions and conduct status reviews. Students are encouraged to call Continuing Studies and Corporate Education at (978) 934-2474 to schedule an appointment. Most advising appointments are held on UML North in the Advising Center. Appointments for the Liberal Arts programs are held in Dugan Hall, Room 102, UML South.

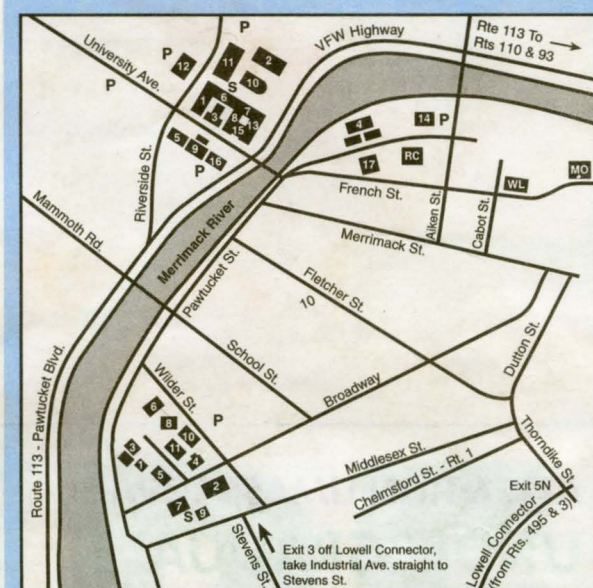
**Evening Supervisors**

Professor Alan Doerr  
Professor Bernard Shapiro

**Faculty Advisors**

Biology, Chemistry, Environmental Science,  
Physics: Paul Damour, Associate Professor  
Civil Engineering Technology: Nihar Mohanty  
Electronic Engineering Technology: Fahd Wakim, Professor  
Information Technology: Ann Marie Hurley, Professor  
Liberal Arts, Criminal Justice, Paralegal Studies: Joseph Lipchitz, Professor  
Liberal Arts, Psychology: Richard Siegel, Professor  
Mathematics: Alan Doerr, Professor  
Mechanical Engineering Technology: Robert Tuholski, Professor  
Engineering Technology Department Head  
Mechanical Engineering Technology: Glenn Sundberg, Assistant Professor  
Plastics Engineering Technology: Stephen Driscoll, Professor

# Campus Information

**North**

- 1 BL Ball Engineering Ctr.
- 2 Costello Gym
- 3 Cumnock Hall
- 4 Dormitories
- 5 Eames Hall
- 6 EB Engineering
- 7 FA Falmouth
- 8 KI Kitson
- 9 LL Alumni/Lydon Library
- 10 EC Pinanski
- 11 OH Olney
- 12 OS Olsen
- 13 PA Pasteur
- 14 Research Foundation
- 15 SO Southwick Hall
- 16 Smith Hall
- 17 Fox Student Union
- P Parking
- S Security

**South**

- 1 Allen Hall
- 2 CO Coburn
- 3 Concordia Hall
- 4 Dining Hall
- 5 DU Dugan Hall
- 6 DR Durgin Hall
- 7 MA Mahoney Hall
- 8 OL O'Leary Library
- 9 Power Plant
- 10 SU Student Union
- 11 WE Weed Hall
- P Parking
- S Security

**Downtown**

- MO Mogan Center
- WL Wannalancit

For UMass Lowell online directions, go to [www.uml.edu/maps](http://www.uml.edu/maps). For UMass Lowell directions, call (978) 934-5800.

**Parking**

New parking stickers are required for all Continuing Studies students. These stickers are available at the University Police Parking Bureau. Call the Parking Bureau at (978) 934-4211 for hours of operation. The Parking Registration Form also is available at [www.uml.edu/parking.html](http://www.uml.edu/parking.html).

This sticker entitles students to park after 5:30 pm in a University parking lot except Cumnock Hall. Students are encouraged to park in the numerous parking lots on the UML North and UML South. **Students and faculty should not compromise public safety by blocking access of fire lanes, ambulance and other emergency vehicles.** Students and faculty should not park in handicap spaces unless they display a handicap sticker. Student and faculty cars will be towed and/or ticketed for violations. In addition, the Lowell Police will tow student and faculty cars if cars are parked in "Residential Parking" areas. Remember to bring your car registration and a photo ID when you come in to get a parking sticker.

Please call the Student and Faculty Support Center at (978) 934-2474 for the locations of parking lots available for use by Continuing Studies students who visit the campus during the day.

**Locating Your Classroom**

Refer to the map and building key above to locate where your class will be held. For assistance, call the Student and Faculty Support Center at (978) 934-2474. If your class has not been assigned a classroom when you register, please check ISIS Web-Self Service at <http://isis.uml.edu>.

**University Escort Service**

The University now operates a motorized escort service seven nights a week from 6:00 pm to 1:00 am. Call Ext. 2222 for a ride anywhere on campus — from the parking lots, to the libraries, the residence halls, or the gym. It is a service designed for the entire University community day and evening students, staff, and faculty.

This newspaper is printed at no cost to the Commonwealth of Massachusetts. The University of Massachusetts Lowell is an Equal Opportunity/Affirmative Action University and does not discriminate in employment or access to programs or services on the basis of race, sex, sexual orientation, color, national origin, religion, handicap, or veteran's status and is in compliance with Title IX of the Education Amendments of 1972 and Section 504 of the Rehabilitation Act of 1973, and the Americans With Disabilities Act, 1990. Any inquiries and/or grievances may be referred to the Affirmative Action Officer, the Title IX Coordinator, the Disabilities Coordinator and/or to the Director, Office for Civil Rights, U.S. Department of Health and Human Services, Washington, D.C.

Every effort has been made to ensure the accuracy of the information presented in this bulletin. However, Continuing Studies and Corporate Education (CSCE) reserves the right to implement new rules and regulations and to make changes of any nature in its program, calendar, procedures and standards, degree requirements, and academic schedules (including, without limitations, changes in course content and class schedules), locations, tuition, and fees. Whenever possible, appropriate notice of such changes will be given before they become effective. When changes are necessary, Continuing Studies exerts reasonable efforts to provide comparable or substantially equivalent instructional services and facilities for those originally designated. However, CSCE assumes no liability for failure to deliver or for delay in delivering such services (including those in support of academic functions or student life) when the causes for such failure or delay are beyond the reasonable control of Continuing Studies — which causes include, without limitation, the following: power failure, fire, accident, natural disaster, work slowdown and strikes, loss of personnel, and acts of public authorities. In registering for courses, each student assumes full responsibility for knowledge of and compliance with the definitions, regulations, and procedures for the University as set forth in the appropriate publications and bulletins.



# HOME FOR THE SUMMER?



*Calling All College Students:*

**TAKE A COURSE THIS SUMMER AT UMASS LOWELL  
AND COUNT IT TOWARDS YOUR DEGREE AT A  
NUMBER OF OTHER ACCREDITED COLLEGES  
AND UNIVERSITIES. (ON CAMPUS OR ONLINE)**

**IF YOU STUDY AT ANOTHER COLLEGE OR UNIVERSITY**, you may be able to take a UMass Lowell course this Summer and transfer it into your program of study at another institution. We offer a wide selection of on campus and online courses, many of which can be used to fulfill degree requirements at other institutions of higher education. Take a look at the courses we're offering this summer... if any of them are comparable to the credit courses required at your institution, you may be able to take them at UMass Lowell this summer and transfer them into your program of study.\*

**Summer courses begin May 23, 2005**

**Summer I: May 23—June 30**

**Summer II: July 11—August 19**

**Online Courses: May 23—August 19**

**Accelerated Online Courses: May 23—July 29**

To speak with one of our advisors about taking a course at UMass Lowell and counting it towards your degree at another college or university, call (978) 934-2474.

**\*Please Note:** Individual schools and colleges have specific policies regarding transfer requirements. Students should check with their originating college or university regarding acceptance of transfer credits from other institutions of higher education.

## ATTENTION UMASS LOWELL UNDERGRADUATE DAY STUDENTS...

**Take courses this summer  
at UMass Lowell and  
complete some of your**

## GENERAL EDUCATION REQUIREMENTS!

A large selection of "Gen Ed 2000" courses will be offered this summer, plus a wide variety of other courses that can be counted as free electives!

For more information and a complete list of the Gen Ed courses that will be offered this summer, check out <http://continuinged.uml.edu/summerschool> or call the Advising Center at (978)-934-2474 for a Summer 2005 Gen Ed flyer.

For additional information on the University's General Education Requirements, please visit <http://www.uml.edu/gened>

*UMass Lowell Summer Courses — Bringing You One Step Closer to Your Degree!*

## REGISTRATION FORM FOR CREDIT/NONCREDIT COURSES

**Note:** Please remember to fill in your work, home phone numbers and email address. This will allow us to reach you in case of class cancellations.

### University of Massachusetts Lowell

Continuing Studies and Corporate Education (978) 934-2480  
883 Broadway St., Dugan 102, Lowell, MA 01854-5104

**PLEASE USE INK AND PRINT**

**CHECK APPROPRIATE REGISTRATION STATUS:**

☐ Summer I (May 23—June 30) ☐ Summer II (July 11—August 19)

☐ Undergraduate Credit ☐ Graduate ☐ Non-credit

Citizenship ☐ US ☐ Other

International Students (Please attach copies of your Visa and an F-1 I-20 or J-1 DS-2019 Form)

Social Security No. \_\_\_\_\_ Tax ID No. \_\_\_\_\_

Name \_\_\_\_\_

Street & No. \_\_\_\_\_

City & State \_\_\_\_\_ Zip Code \_\_\_\_\_

Date \_\_\_\_\_

Sex ☐ M ☐ F \_\_\_\_\_

Work Phone \_\_\_\_\_

Home Phone \_\_\_\_\_

Email \_\_\_\_\_

Company Name \_\_\_\_\_

Street Address \_\_\_\_\_

City, State & Zip \_\_\_\_\_

Change of name or address since last registration? ☐ yes ☐ no

Former name \_\_\_\_\_

Will you be using veteran benefits? ☐ yes ☐ no

State/Active Duty \_\_\_\_\_ G.I. Bill \_\_\_\_\_

COURSES FOR WHICH YOU ARE REGISTERING											
Course Number					Course Title					Credits/Contact Hrs.	
					SUMMER I						
					SUMMER II						

**COMPLETE IF PAYING BY CREDIT CARD**

☐ MasterCard ☐ VISA ☐ Discover Account Number \_\_\_\_\_

Expiration Date \_\_\_\_\_ Customer Signature \_\_\_\_\_

### Tuition and Fees

**Tuition**

**Registration Fee**  
(\$30 per course)

**Late Fee**  
(Save \$50 Late Fee - Register Early)

**Total** \$ .